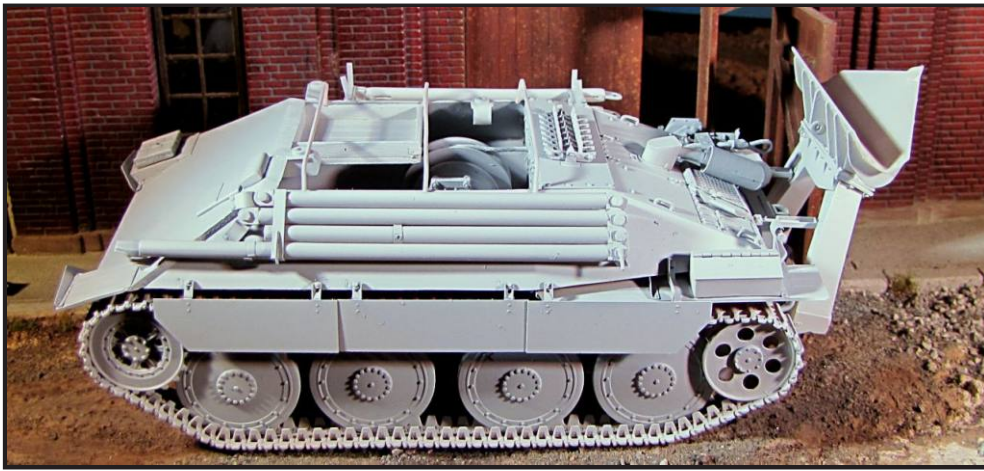


## 1/35 German Bergepanzer 38(t) Hetzer - late



No.35402

WWW.LZmodels.com

Made in EU

contains 1 highly detailed and accurate model

**138** resin parts

**300+** PE parts

**+ fine chain, copper rope, plastic parts, wires and balsa wood stick needed for assembly**

instructions and references on CD



conversion kit for Tamiya's Middle Hetzer kit or Dragon's late Hetzer kits

glue and paints not included

suitable for advanced modellers

keep safety rules for work with resin

**Keep safety rules when working with resin.**

**For safety reasons, and due to the complexity of construction, this kit is recommended only for advanced modellers.**

**The kit contains small parts, keep it out of the reach of children.**

**Glue and paints not included**

**Contains 138 resin parts, 300+PE parts and plastic parts, fine chain, copper rope, balsa stick and wires needed for assembly**

Bergepanzerwagen 38(t) / Bergepanzer 38(t) was a recovery vehicle based on Hetzer's base, with lower open-top superstructure, manufactured by BMM company in Prague. The plans were approved in September 1944 and called for production of 170 vehicles until the end of 1944. In fact just 101 vehicles were built. To meet the production plans it was decided to convert 64 Summer production's Hetzer into armoured recovery vehicles, but it is unknown how many were actually converted. Production was much slower than plans, and total number of about 180 vehicles was produced until the end of the war. The Bergepanzer was equipped with two-ton folding jib crane used to handle engines and other heavy components. Additionally the recovery vehicle was equipped with five-ton winch of Baumgarten company. The winch was driven by the vehicle's engine through transmission system. At the end a blade was installed at the rear of the hull, but it is again unclear how many vehicles were equipped with it. There were also some development works to install the blade at the front of the vehicle, as seen in the company blueprints, but probably these plans were never realized.

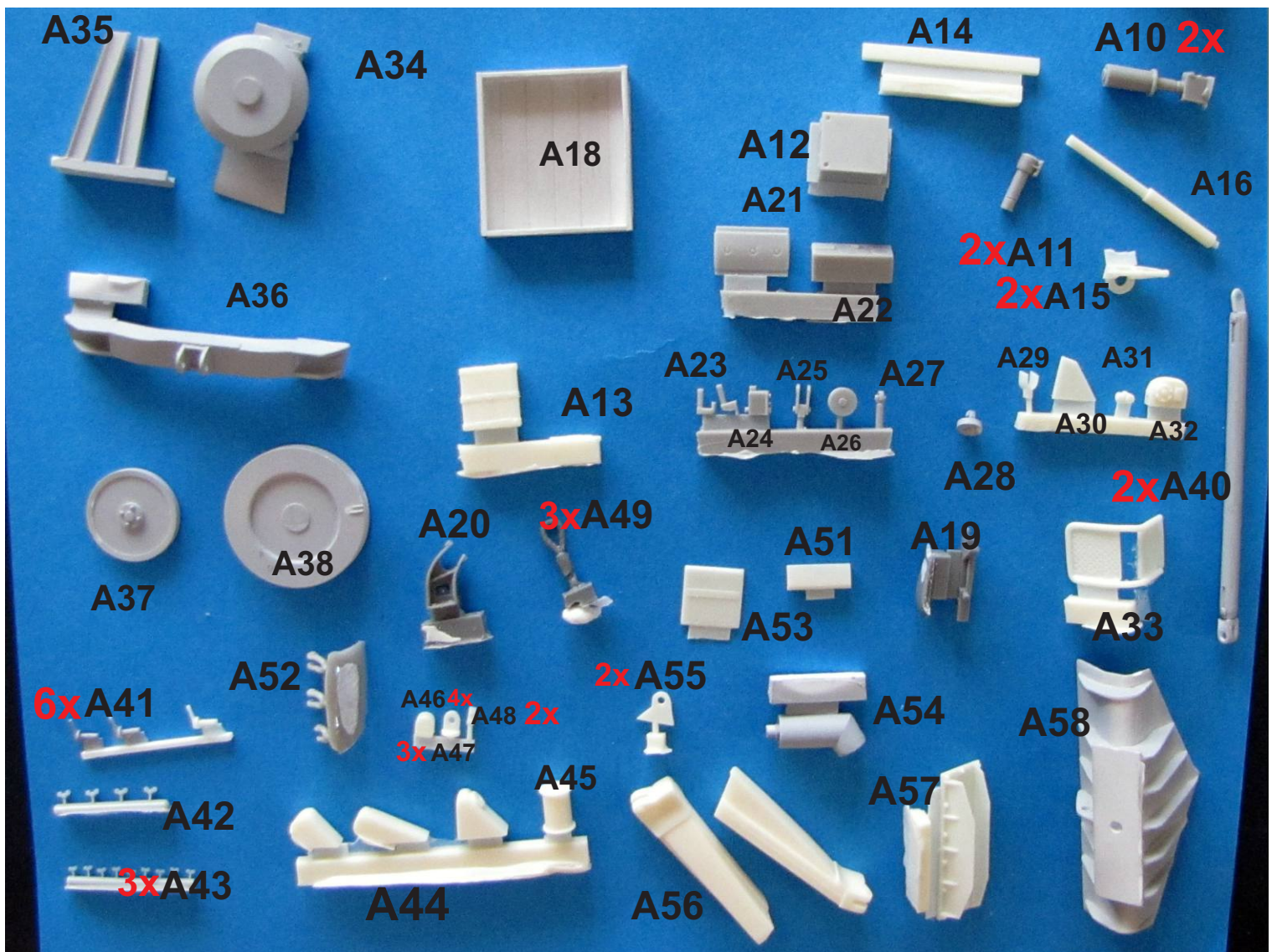
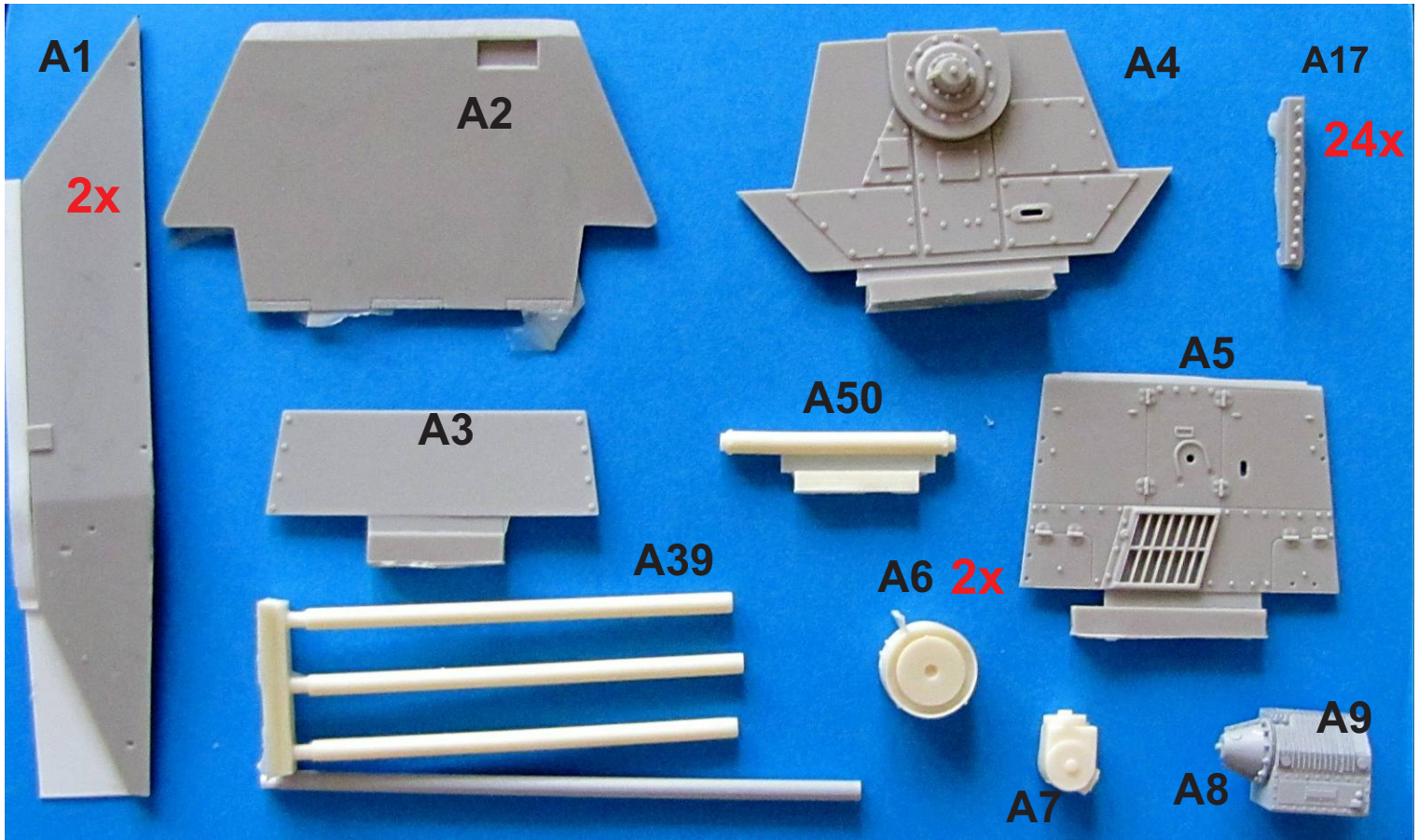
This conversion is to be used with Tamiya middle Hetzer kit or with any Dragon late version. If Dragon's kit is used, a little extra sanding and filling will be needed to fit sides on the lower hull. This late version of the Hetzer with the crane (can be mounted on in working or disassembled position) winch and the blade might be more suitable for Dragon's kit, but we will soon offer also set of late wheels as an option for guys who have or prefer using the Tamiya kit

Special thanks to Michael McLaughlin, who kindly supported this development with references and technical help to get it as accurate as possible.

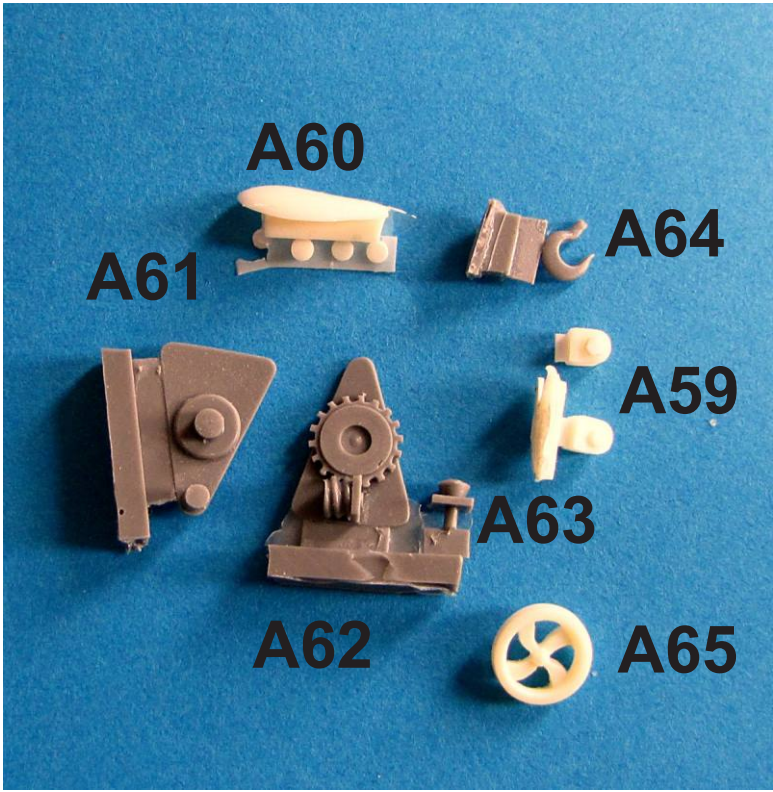
Test build by Libor was running at MM website earlier:

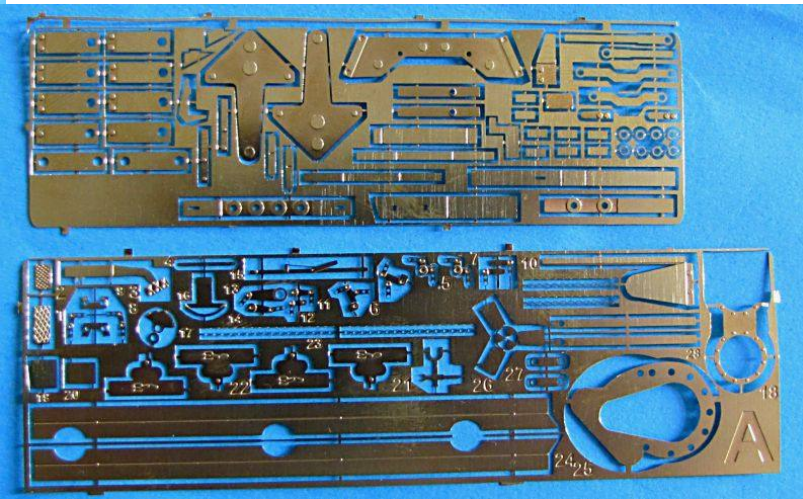
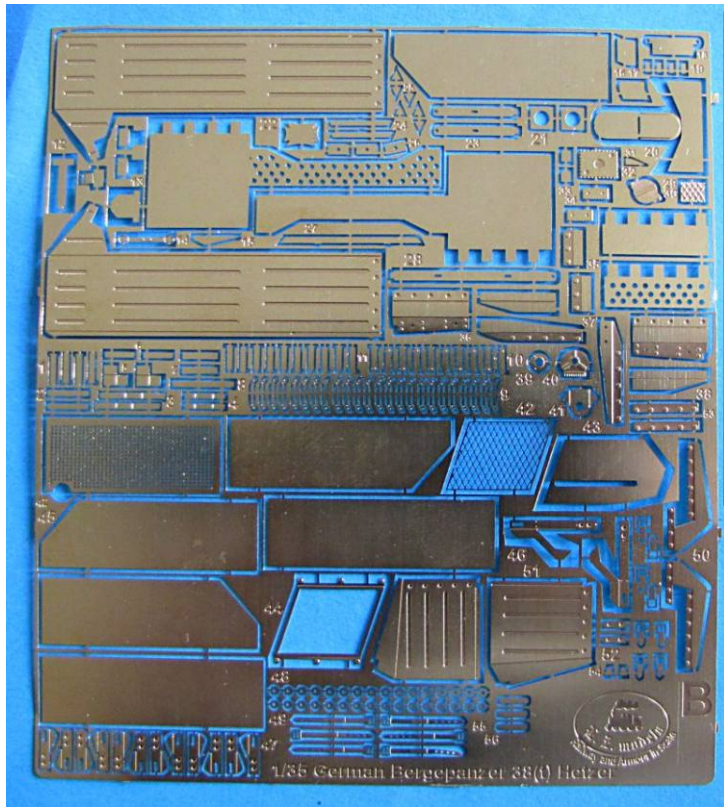
<http://www.militarymodelling.com/forums/postings.asp?th=54255>

Number of pieces in red if multiple

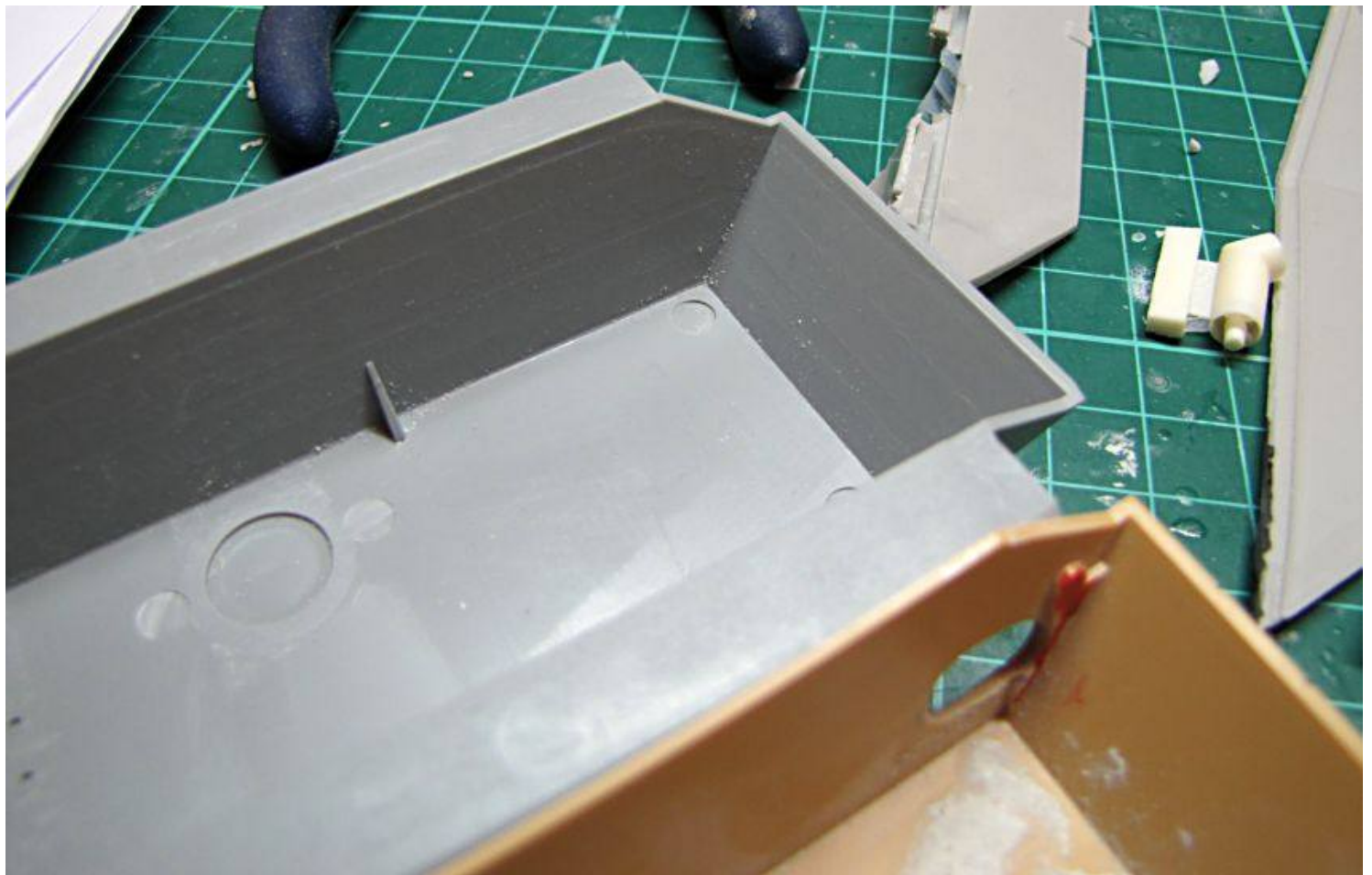


127 resin

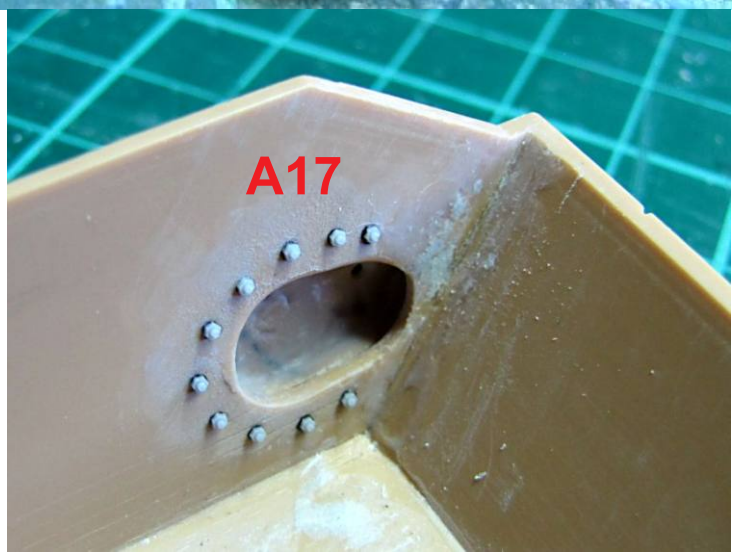
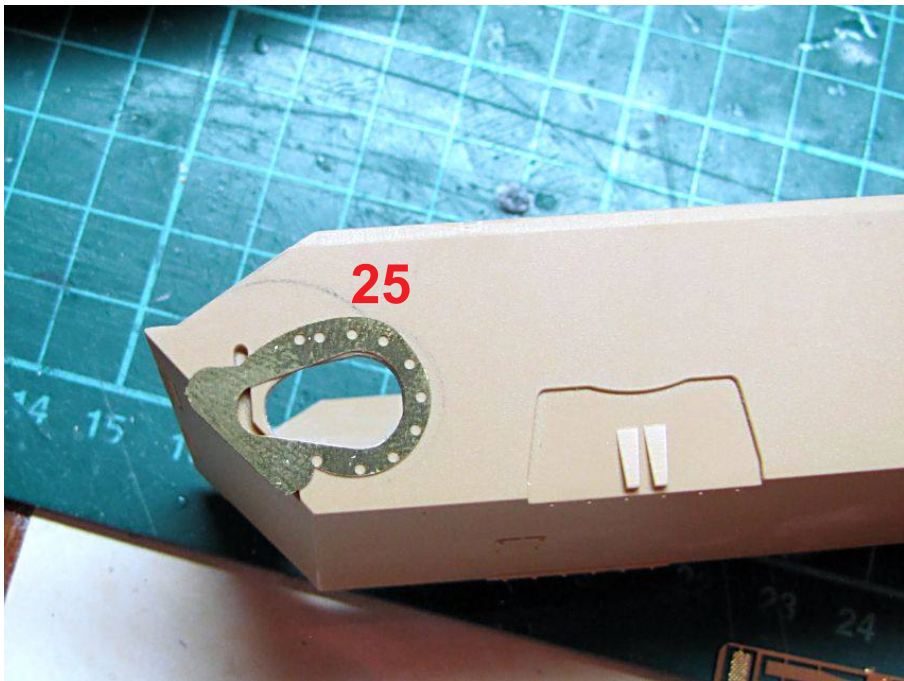




## Assembly:

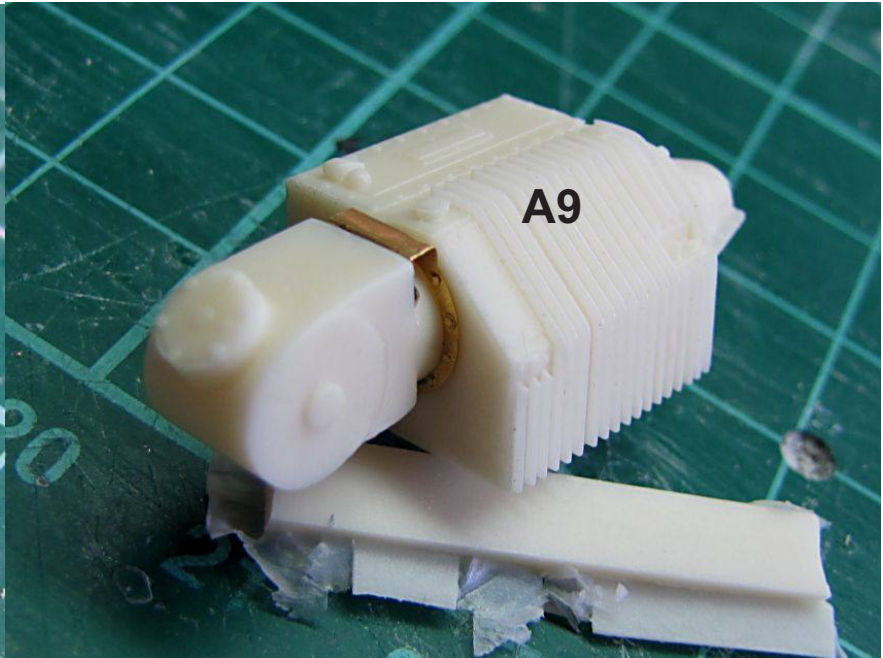
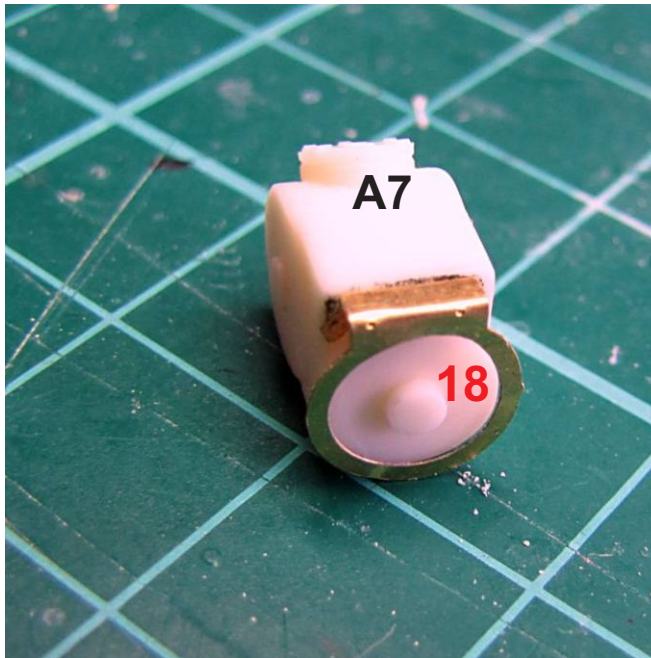


There is a bit of more work needed on Tamiya lower hull (yellow), with Dragon kit (grey) this step should be easier. I used a PE template provided in the kit and made holes in hull sides. Any hand drill will work great on this job. The PE template will be used to mark position of resin bolt heads inside the hull then. Finally I cut off all plastic not needed inside the hull and some pin marks and other areas are filled and will be cleaned with sand paper. Then I completed the final drive castings from the kit - used once again my favorite black loctite glue to fill gaps and get cast-like surface (its excess is easily washed out with debonder once cured) - and with a rotary sanding bit I made an opening in their inner side. Now the kit parts D 68+D 69 - towing lugs - are not suitable for *late* version of the Bergepanzer, and they have to be changed as shown in my next steps

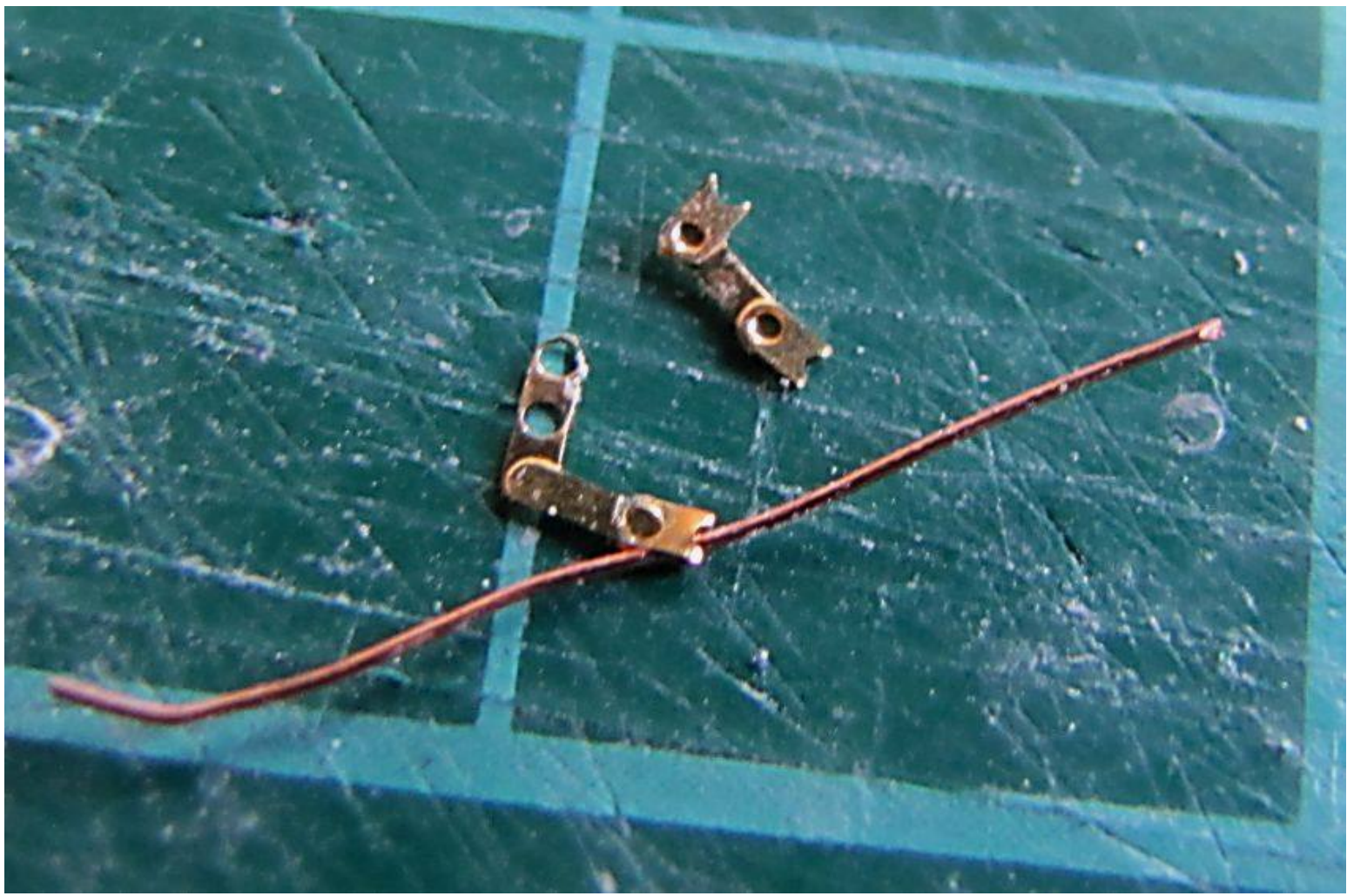


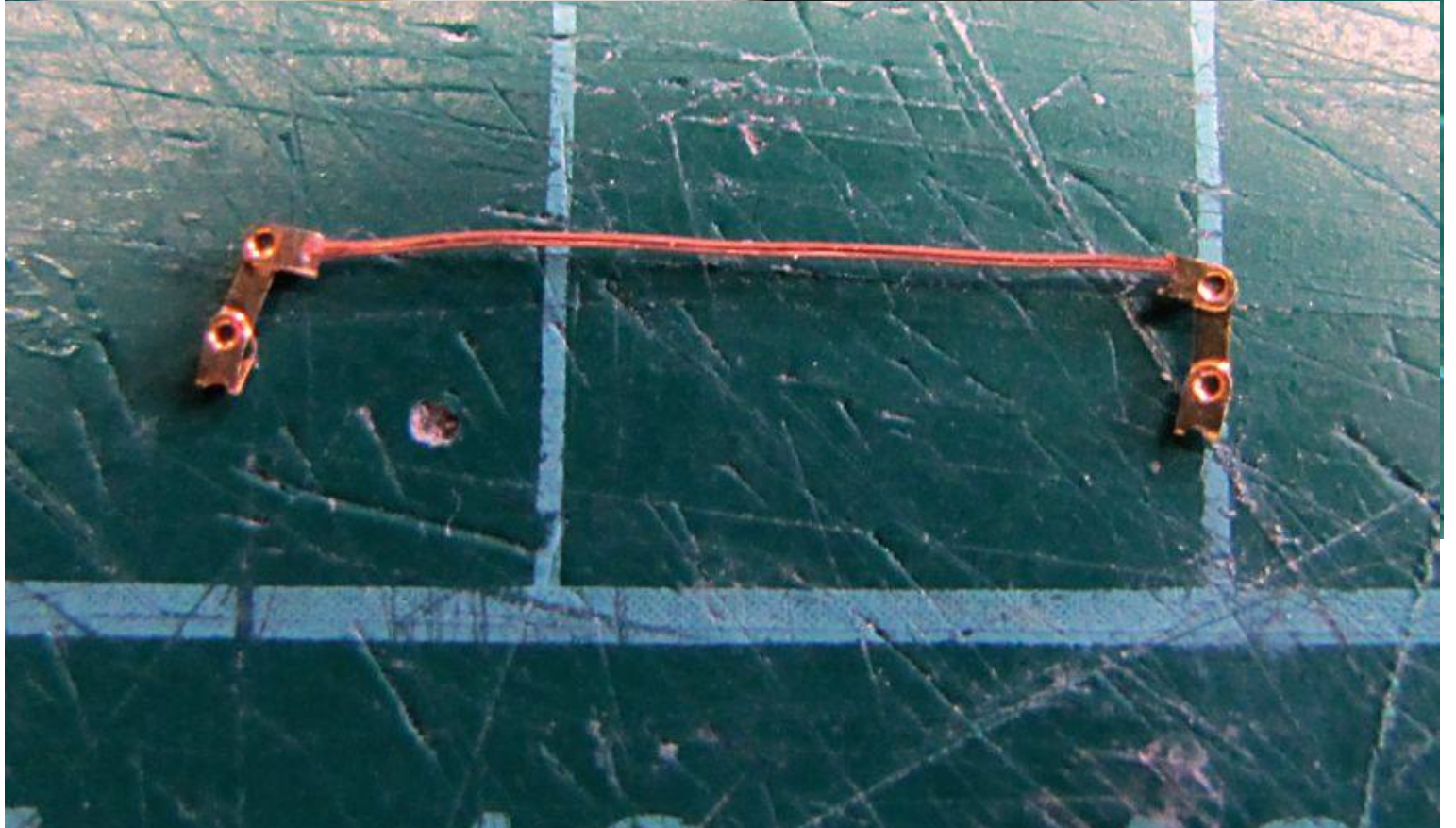
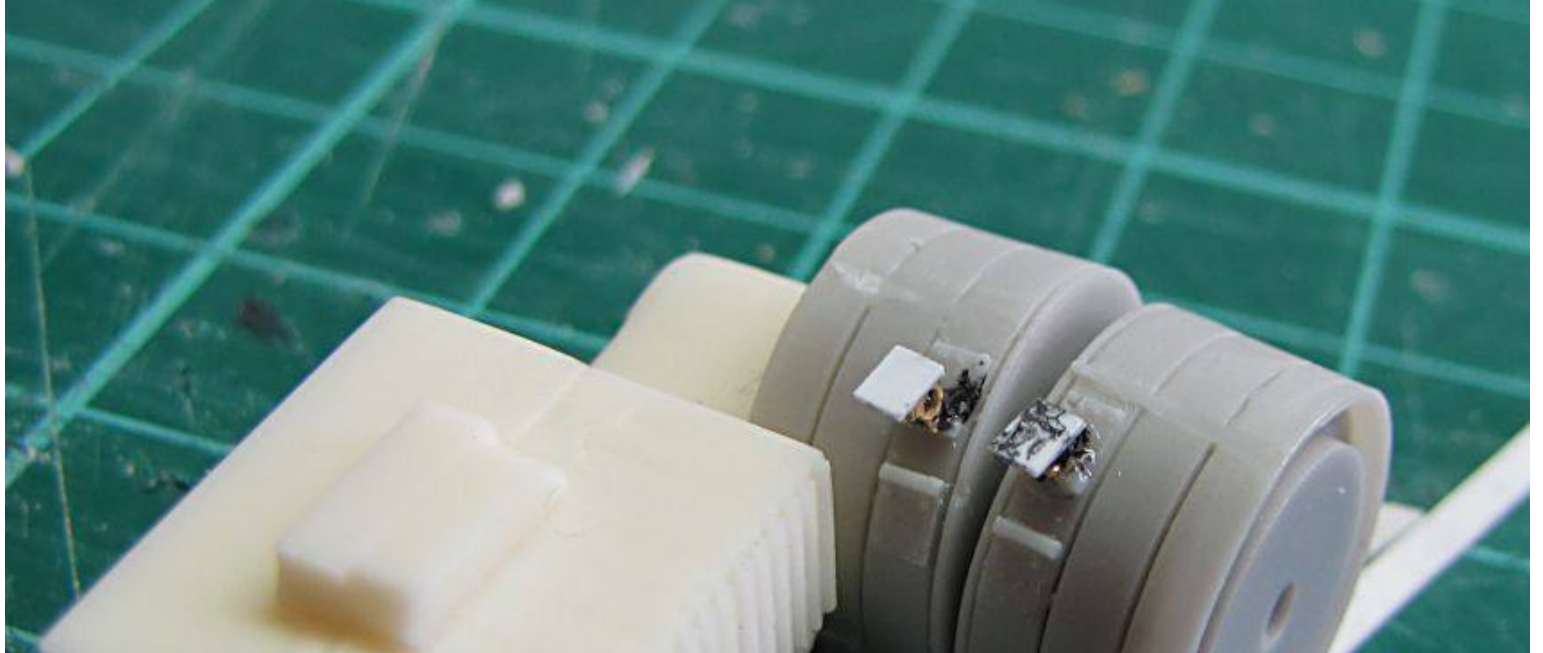
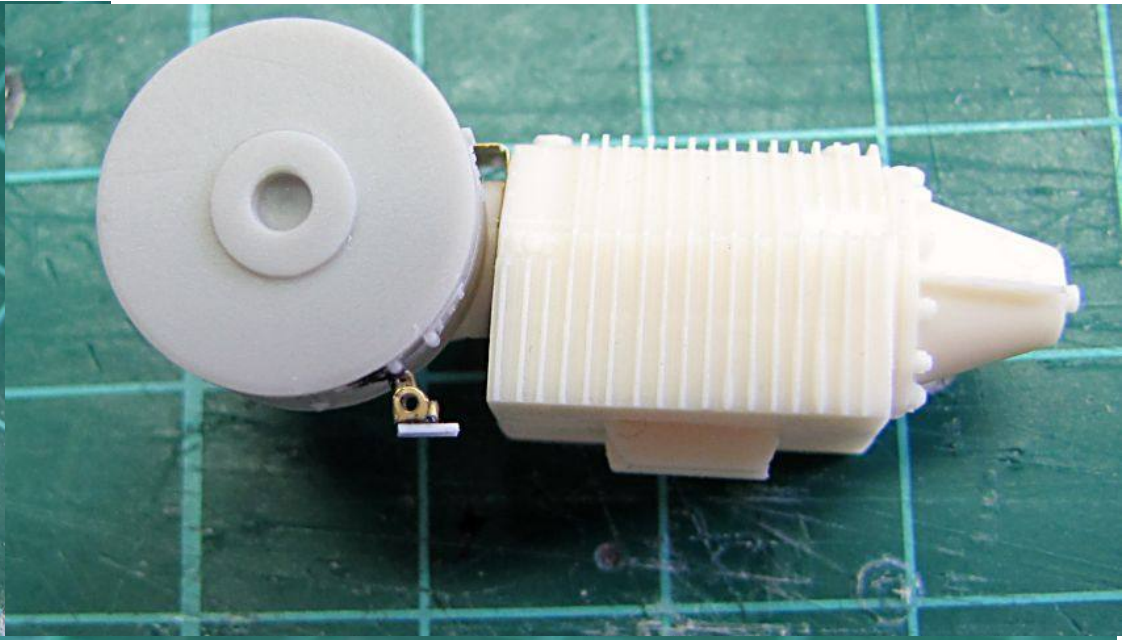
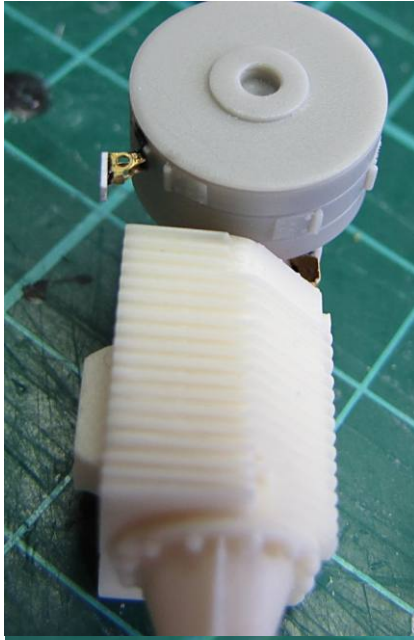


Towing lugs changed

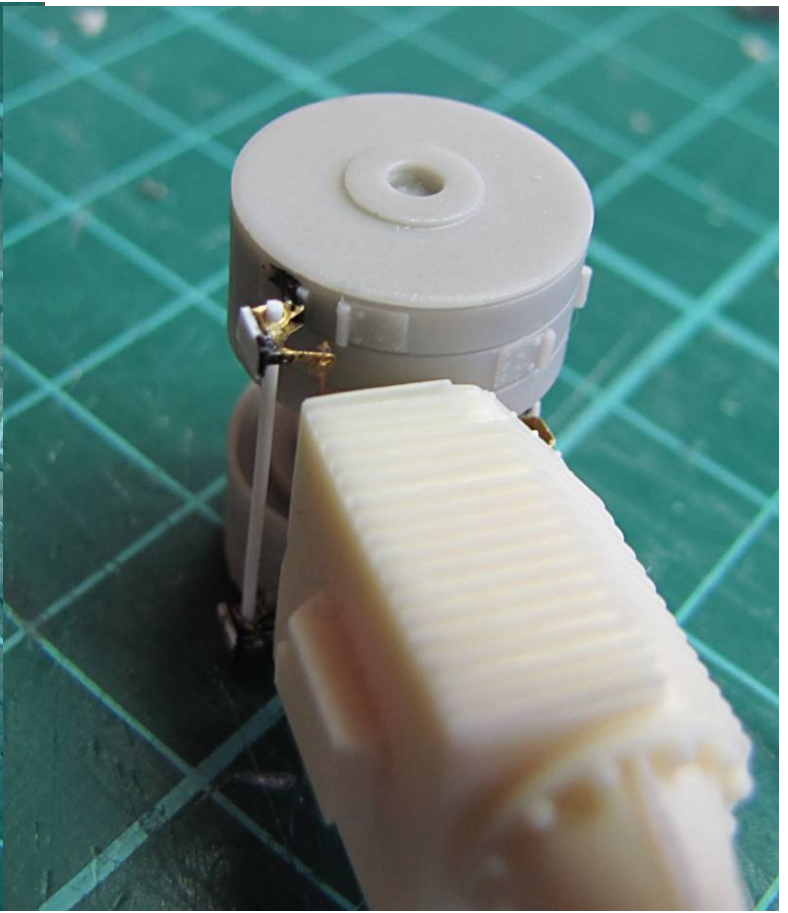
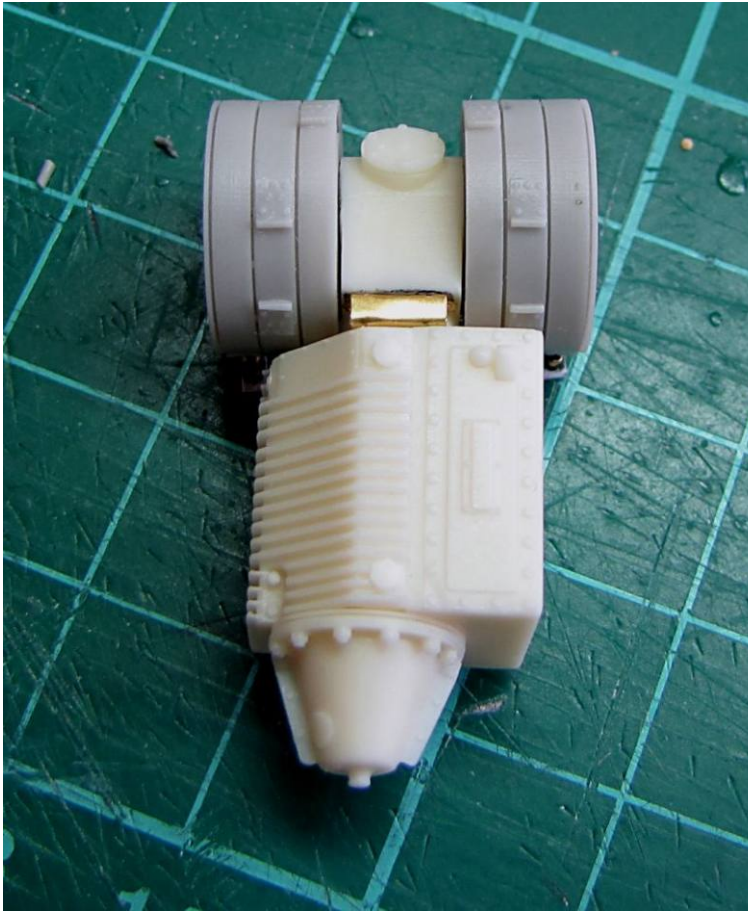


Marks on PE "18" show how to bend it, then the bit was assembled between two parts of the gear box and all glued together. PE "8" and "9" are tiny, but easy to work with, to bend them properly I used 0,3mm wire stuck in the middle hole, which helped to fold second half of it 180° to the back. All similar parts with these "clamps" are to be done the same way. My tweezers worked well to shape PE mountings, and these were glued on 1x2mm plastic strip, and whole thing finally assembled on brake belt. Its right position is visible in the pictures. Opposite part made the same way. The both pieces assembled on the gear box, and 0,6mm about 18,5mm long wire (I used plastic) connected both mountings together, pulled out a bit on driver's side - where a pedal will be assembled later as shown in reference picture. Finally I connected together earlier prepared PE bits - 0,3mm wire 16mm long used - and whole thing was glued on plastic bases, just at the front of mountings on both sides

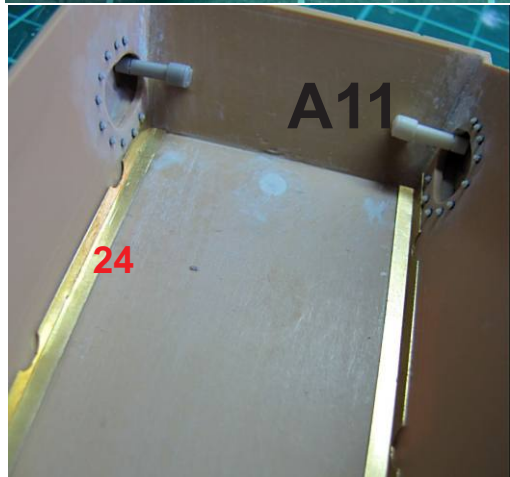
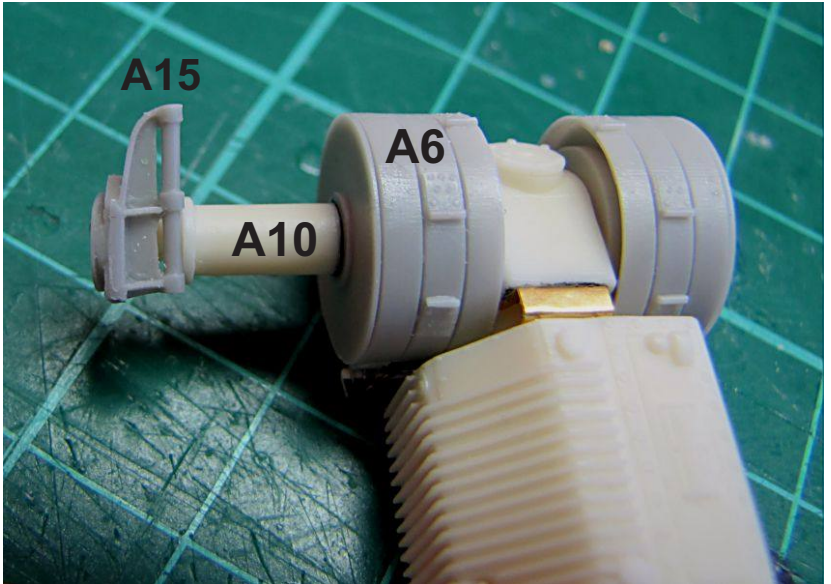
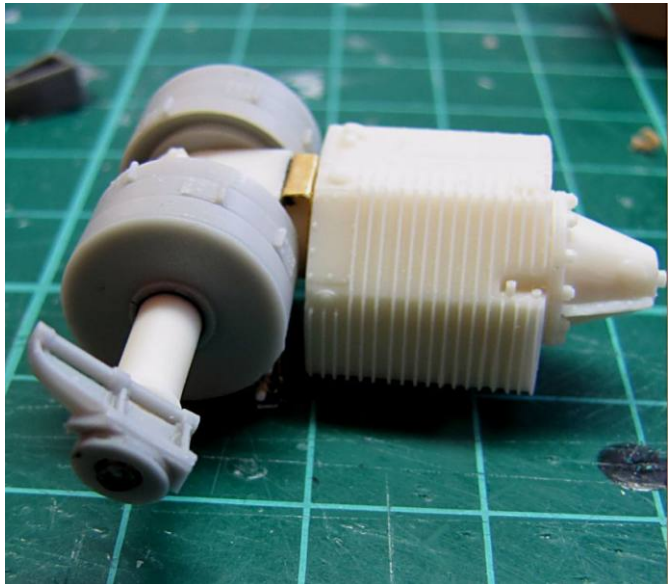


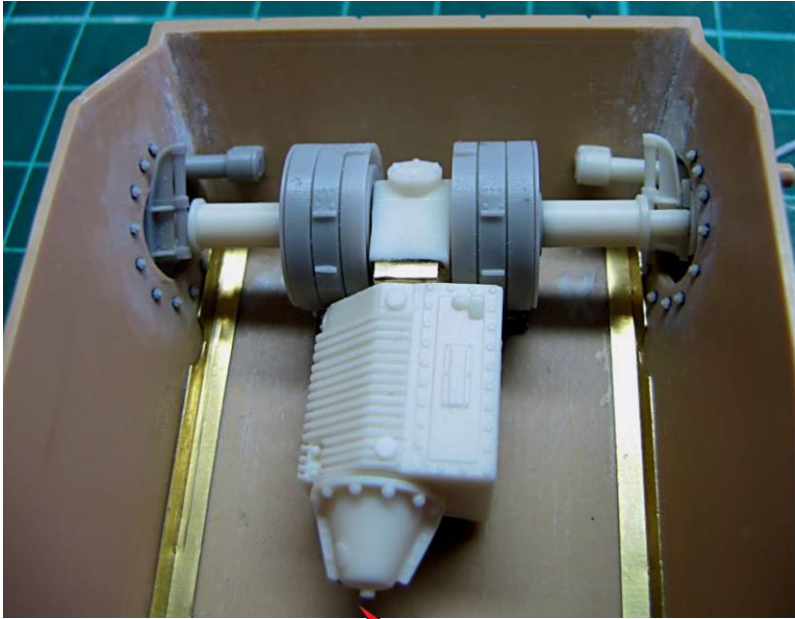
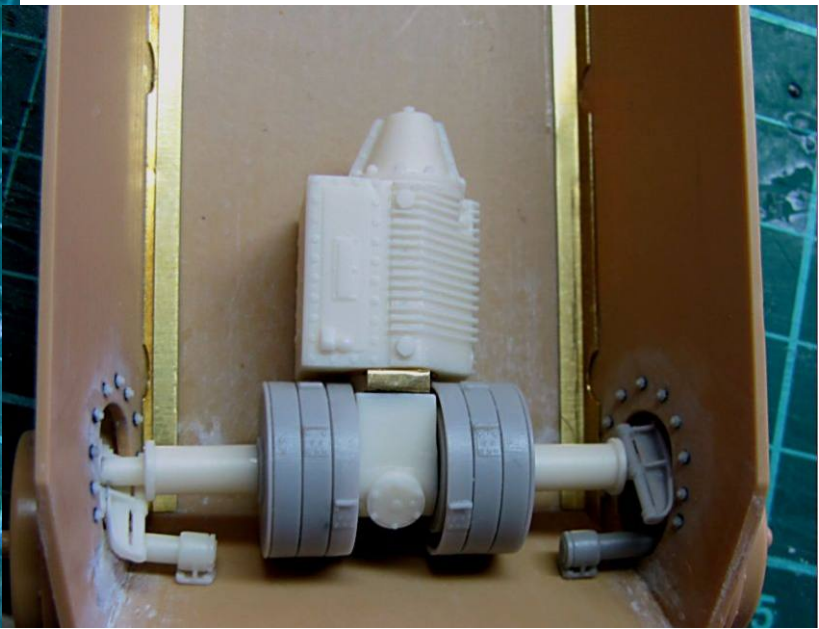
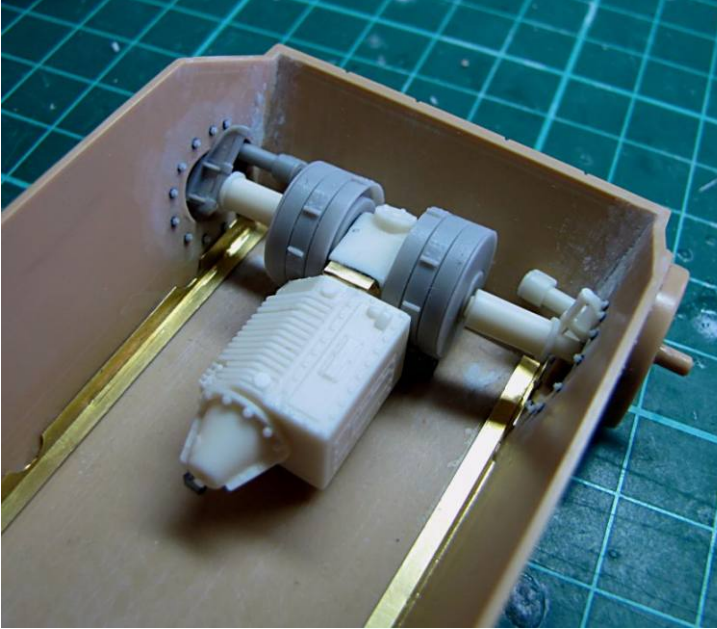






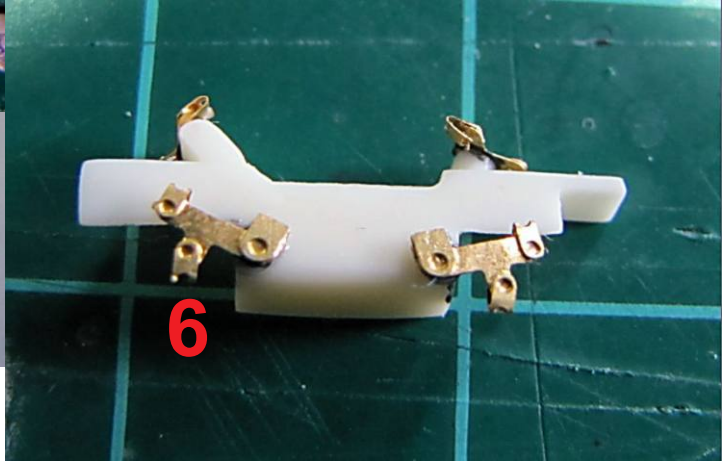
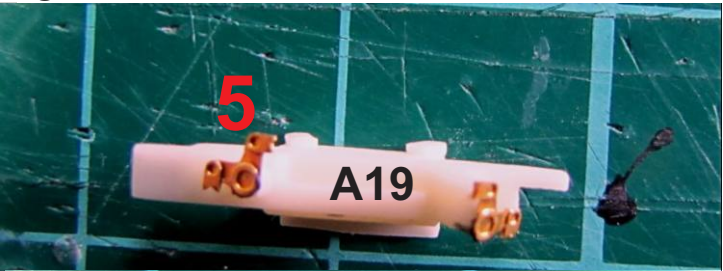
Now I added PE 24 "angles" inside the hull and two small bits on the front. Continued with axle tubes assembly. These have to be cut off the feeder as long as possible - two small bits glued on their ends exactly same way. Then I assembled left tube with the gear box and whole thing placed in the hull. Right shaft was stuck between opening in the wall and gear box - and at the end glued together, and also whole gear box was glued on the floor exactly in the middle of the hull width.

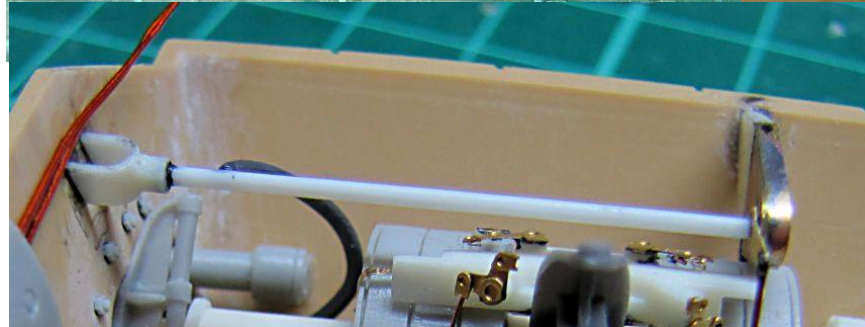
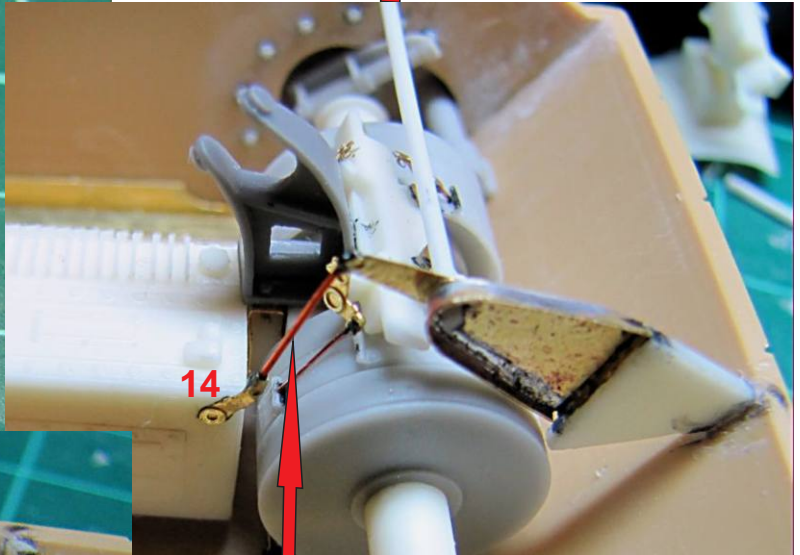
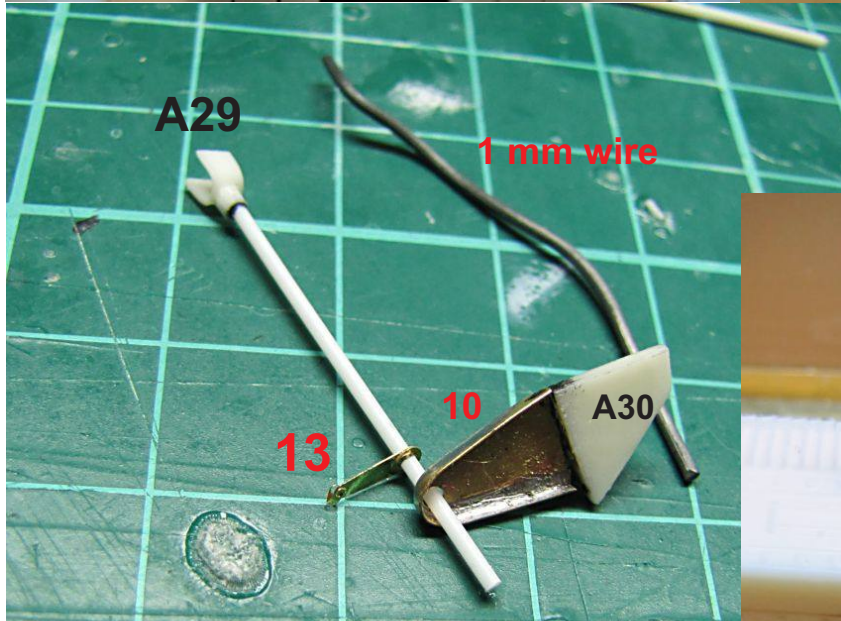
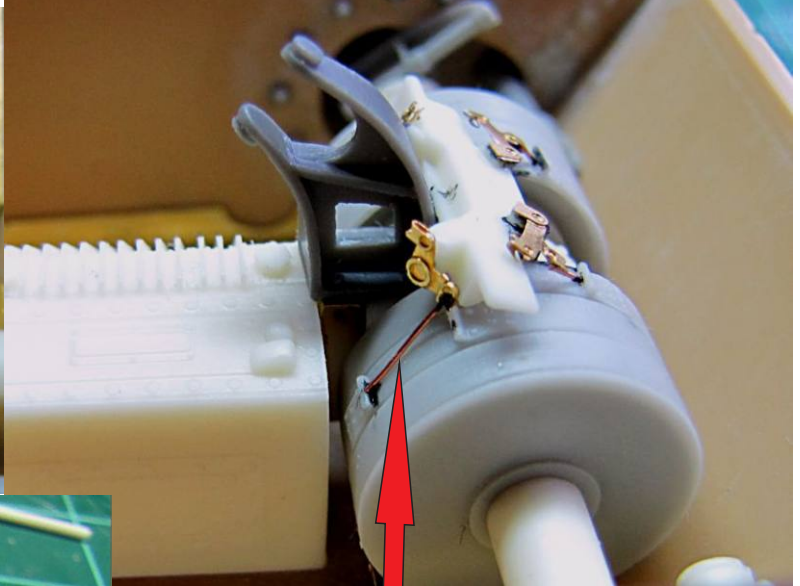
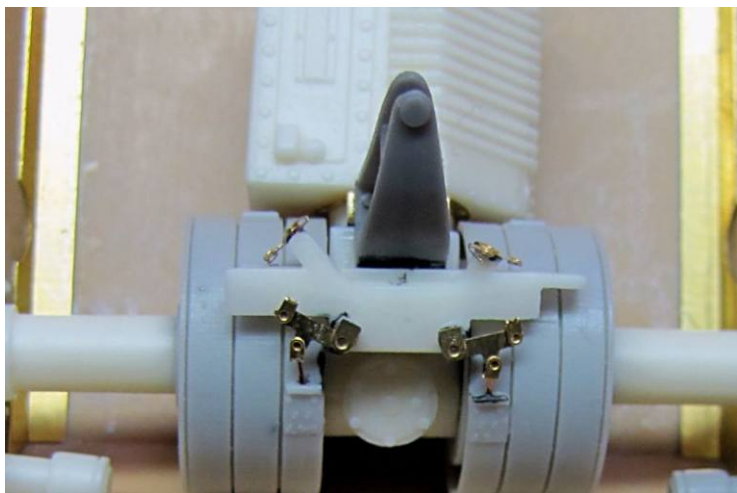
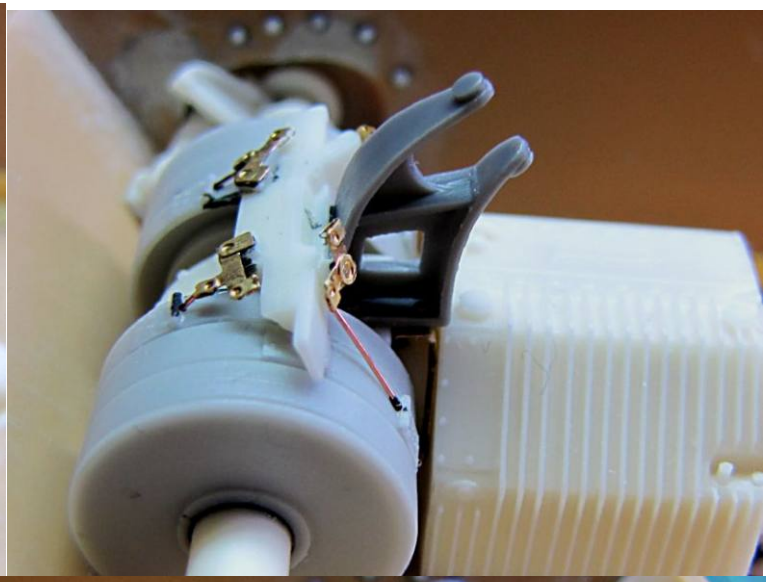
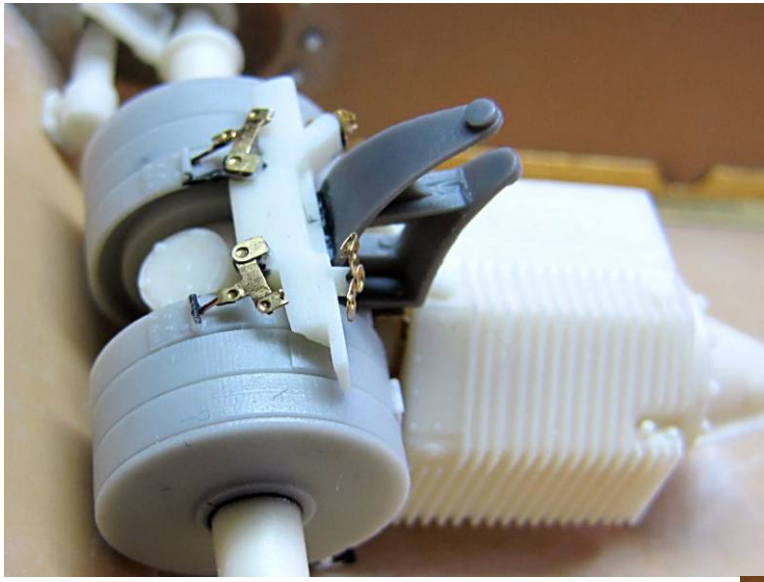




pin is located exactly in the middle of the hull width

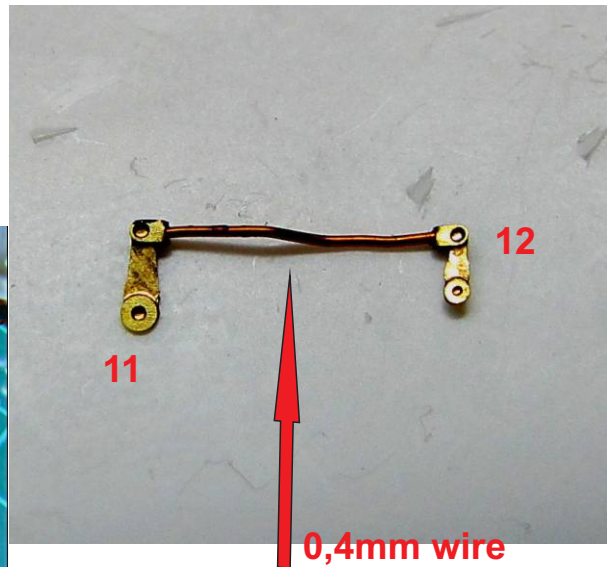
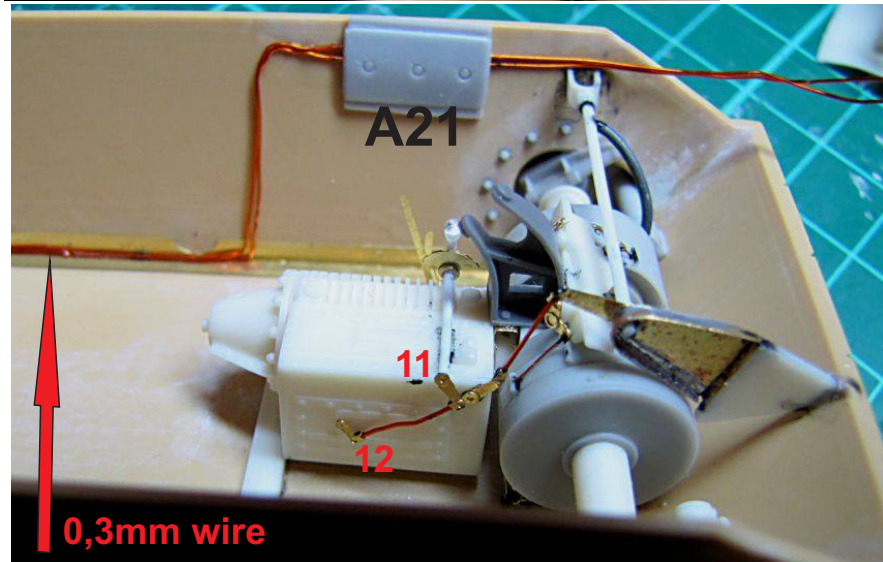
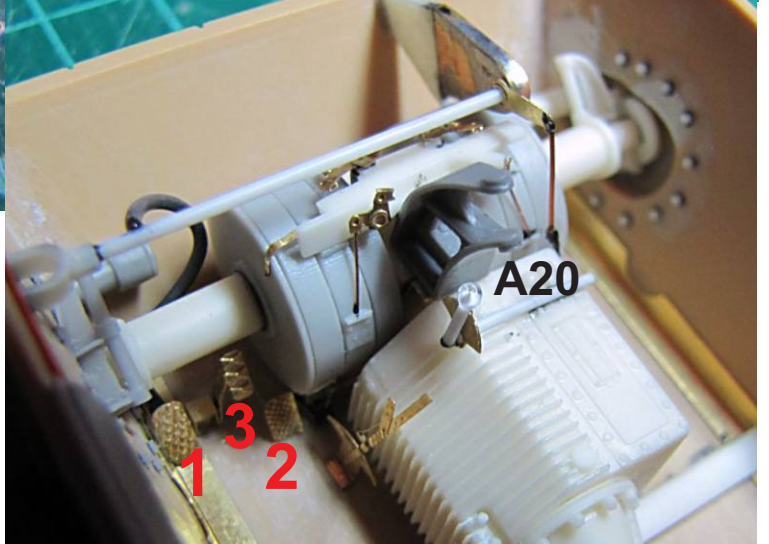
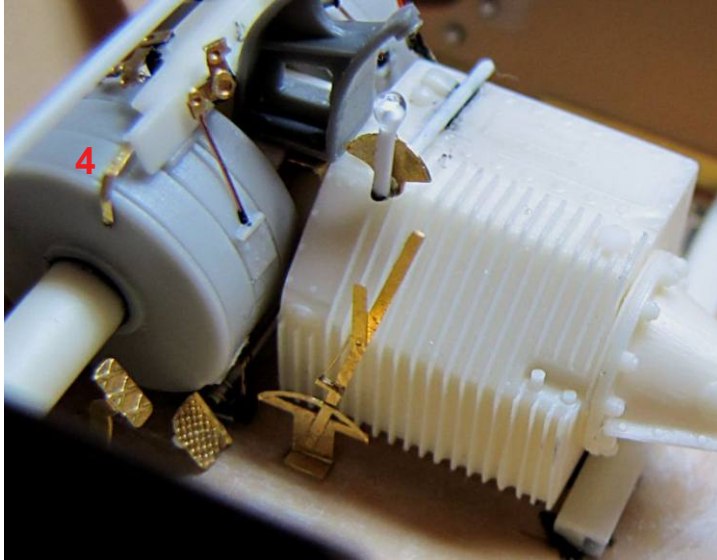
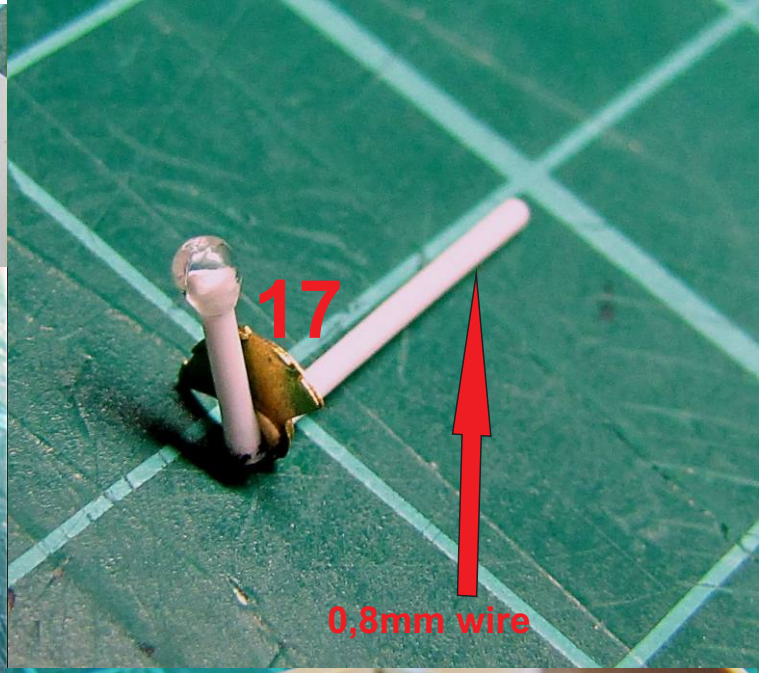
Continued on transmission gear details. PE shaped and glued on the bar, first one side, then another.

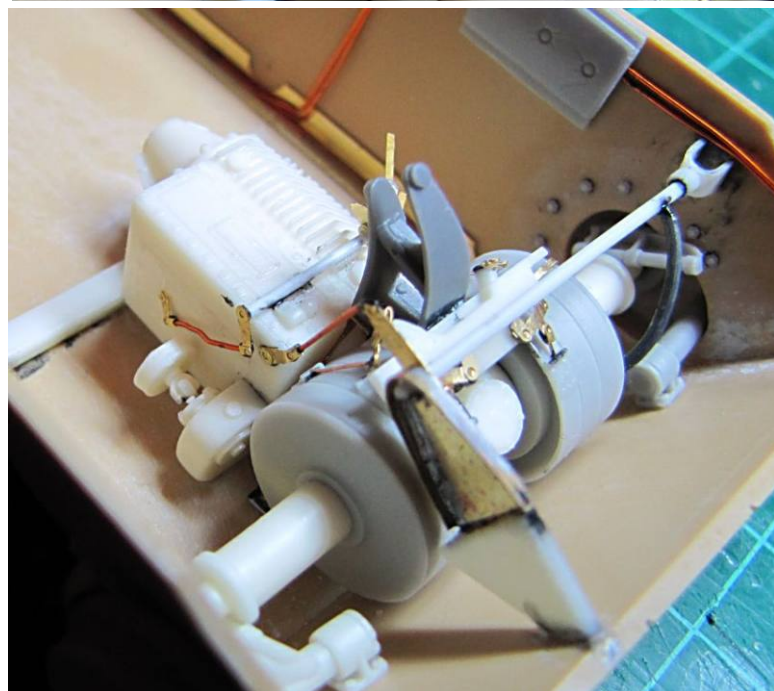
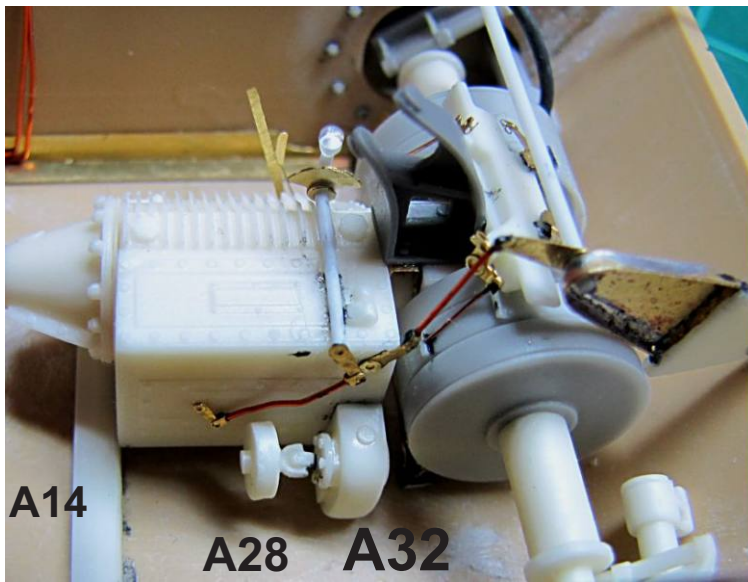
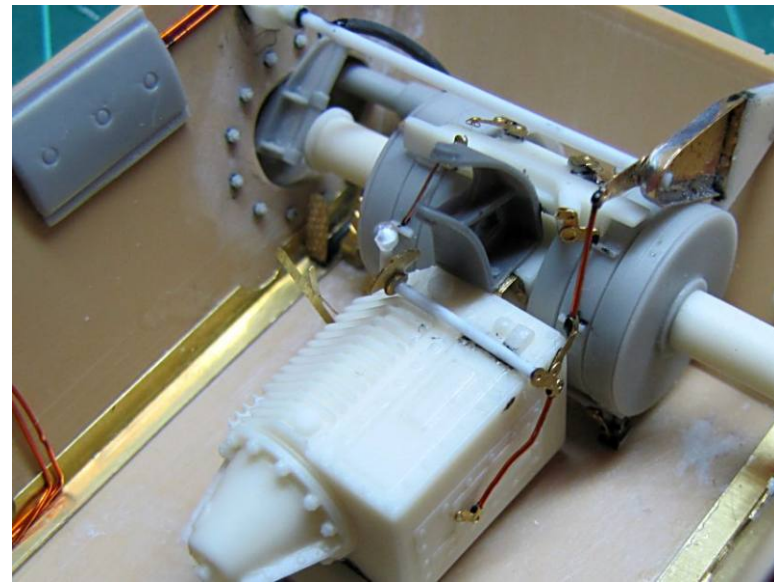




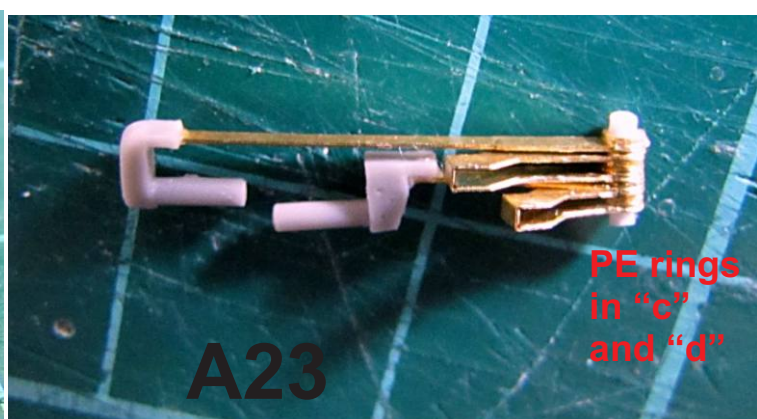
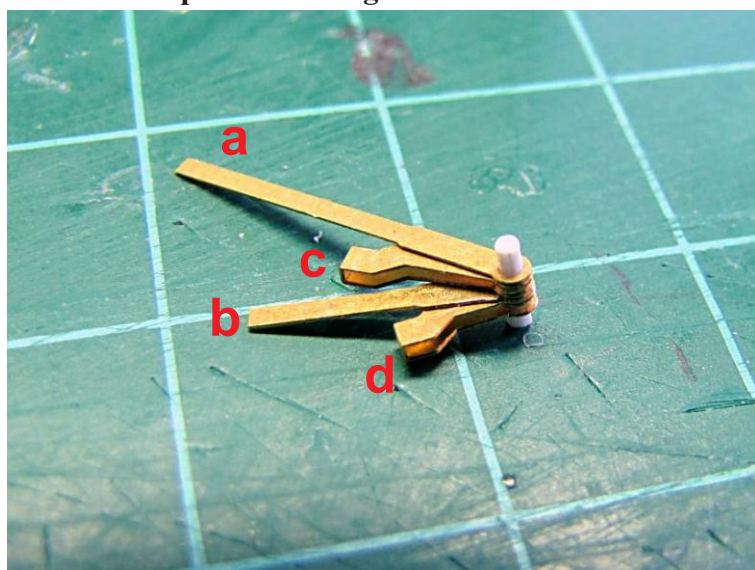
I used solder to complete PE holder, which was then glued on its opposite resin part, then other parts were added - PE arm and 1mm diameter rod 27,4mm long + its resin holder - and whole thing mounted on the hull walls.

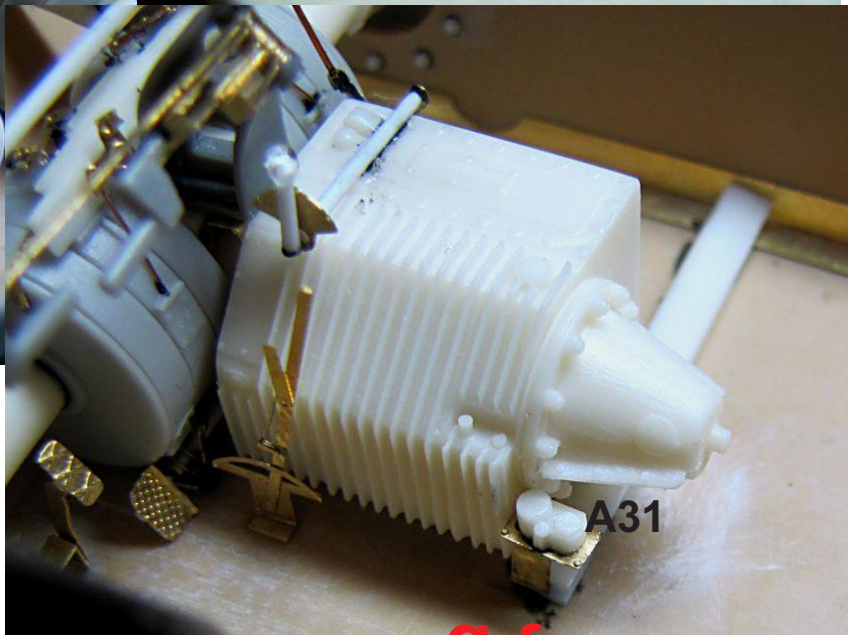
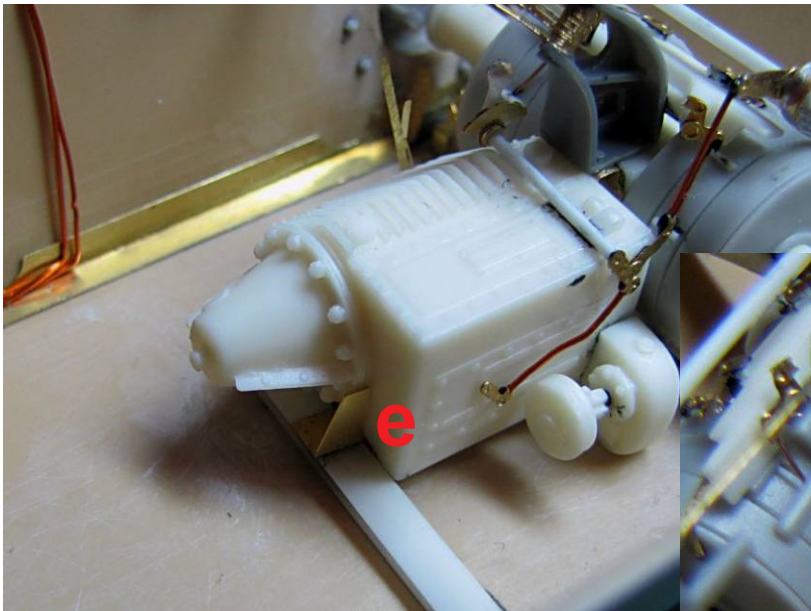
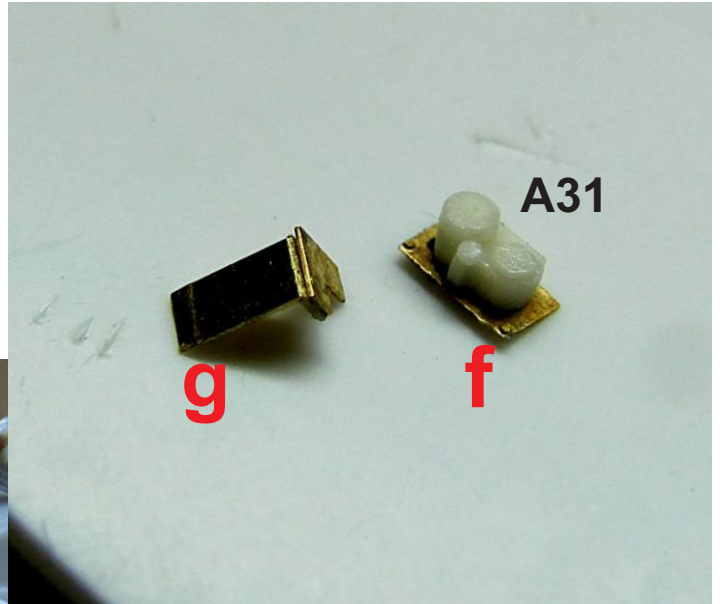
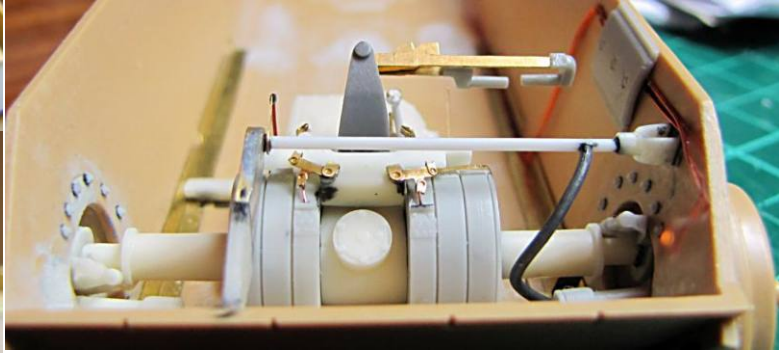
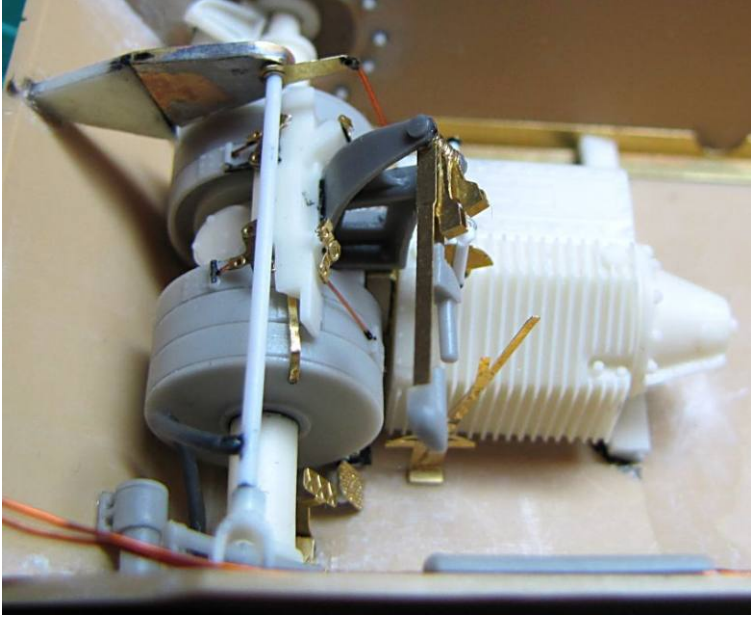
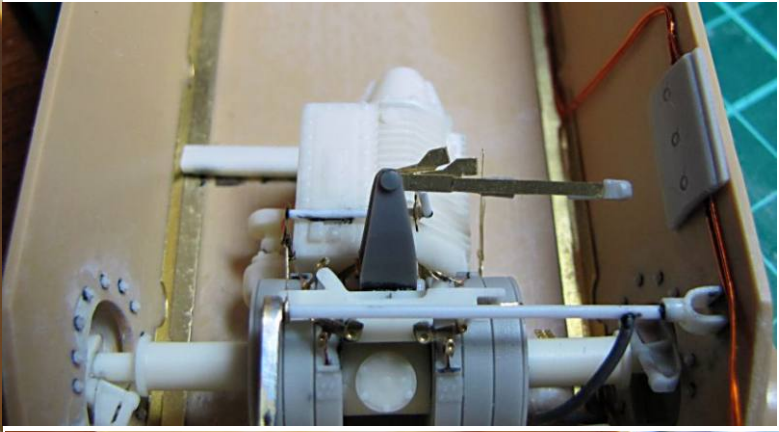
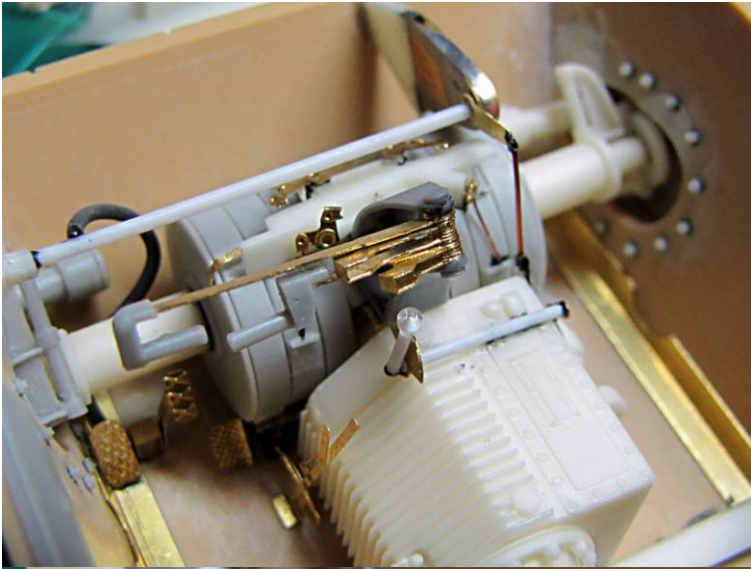
More PE parts and details added, pedals and levers. Assembly is shown in pictures. The ball on the lever mounted on the top of the gear box is made of C/A glue - the rod top was stuck a few times in extra thick glue. Also small gear box for the winch shaft mounted on the main transmission box.



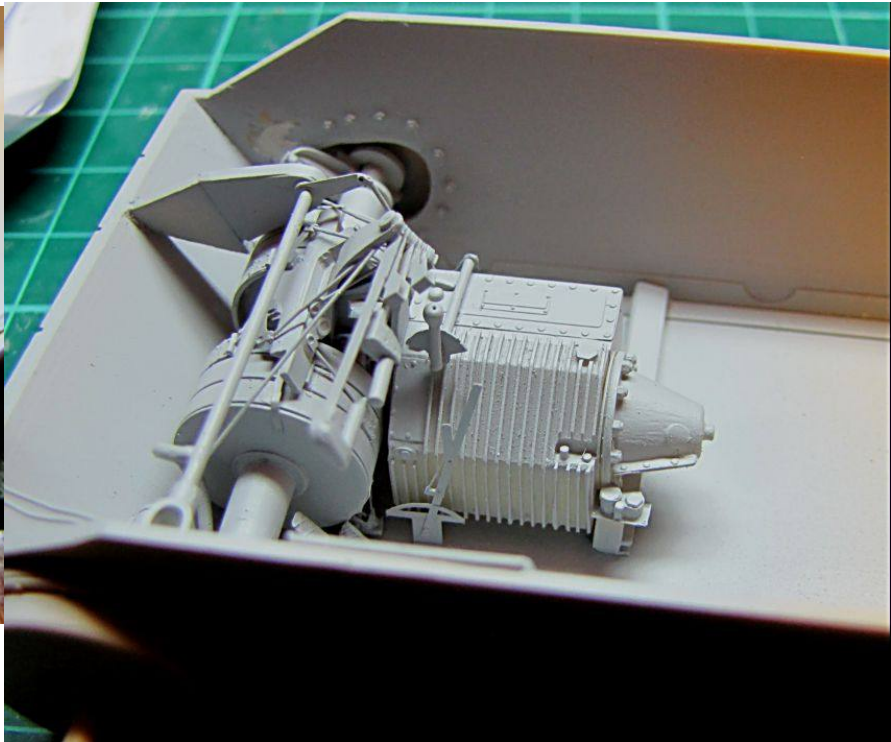
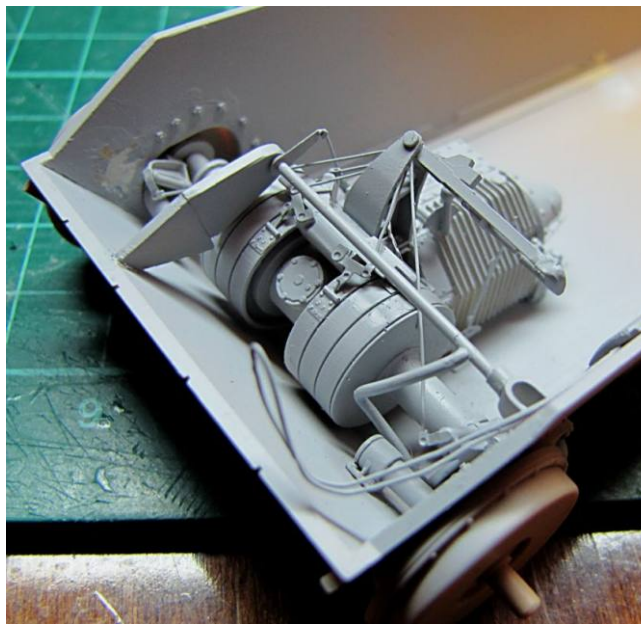
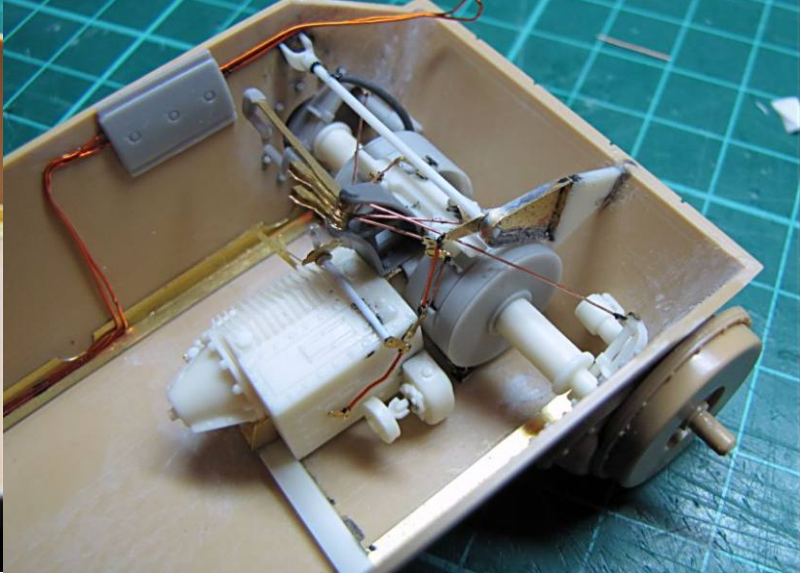
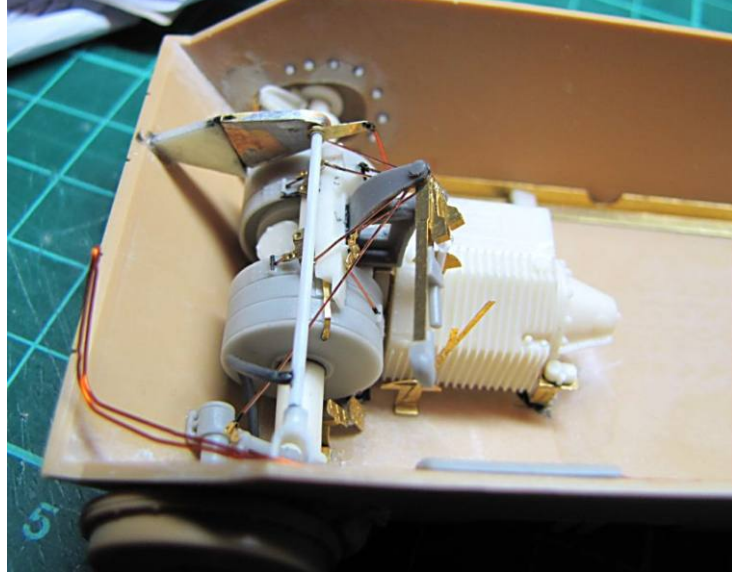
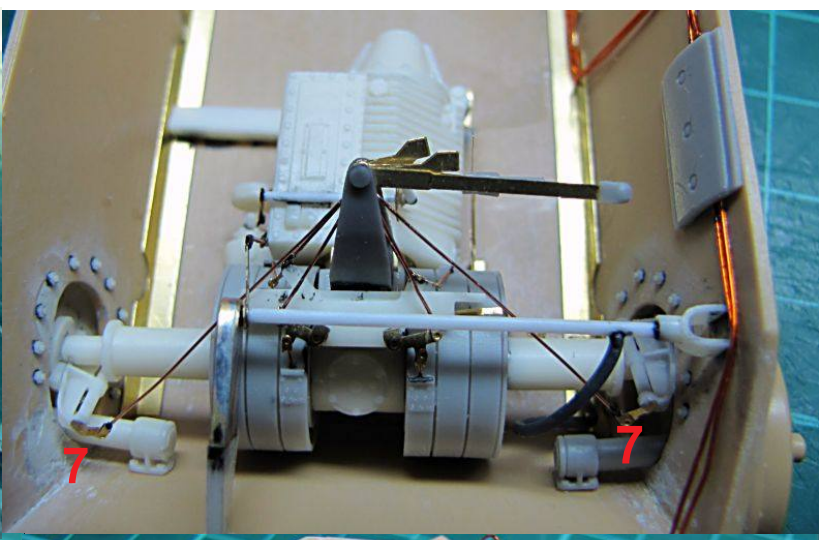
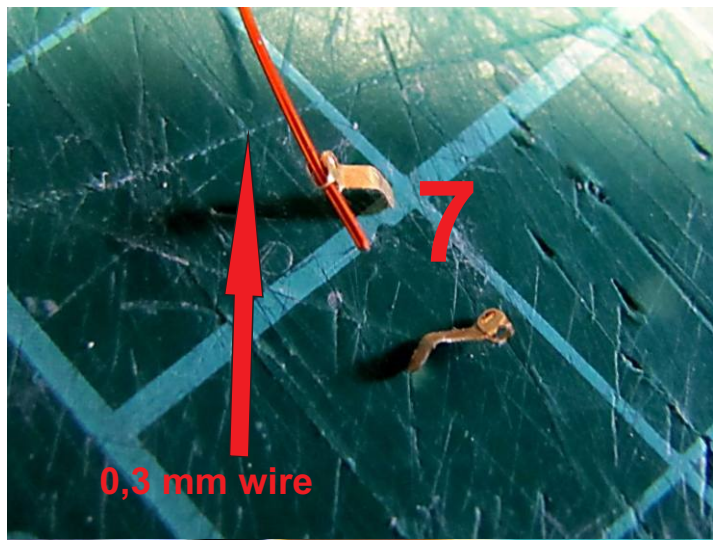


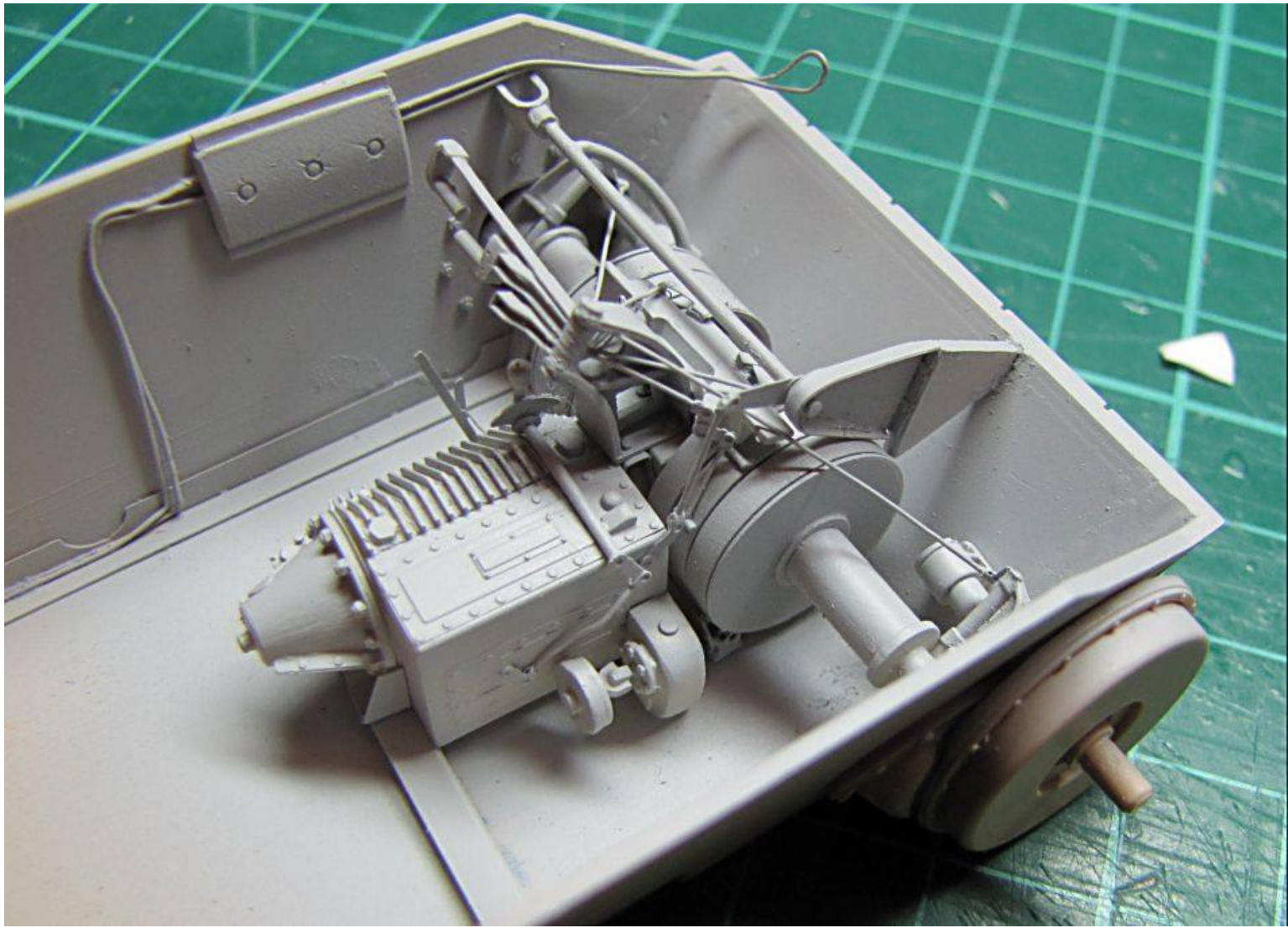
Levers and PE rings assembled on 0,8mm wire or rod 2,7mm long, resin handles added and whole thing mounted in place. Once again some other details added



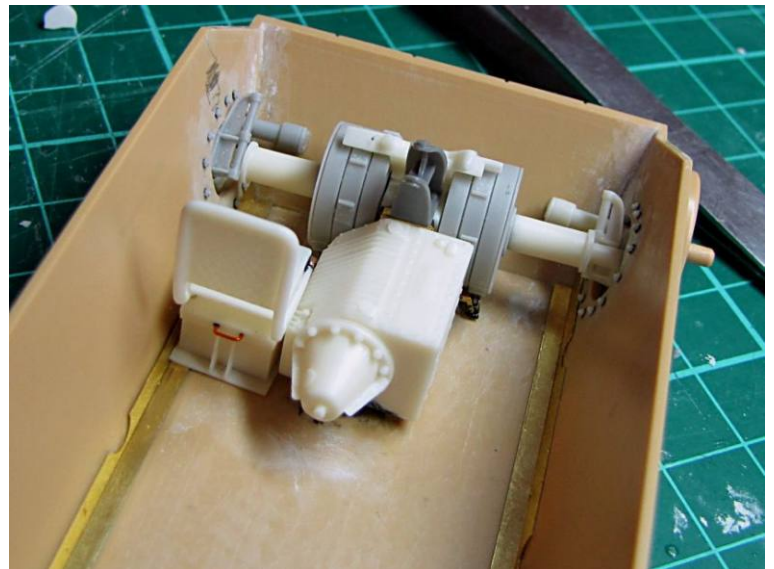
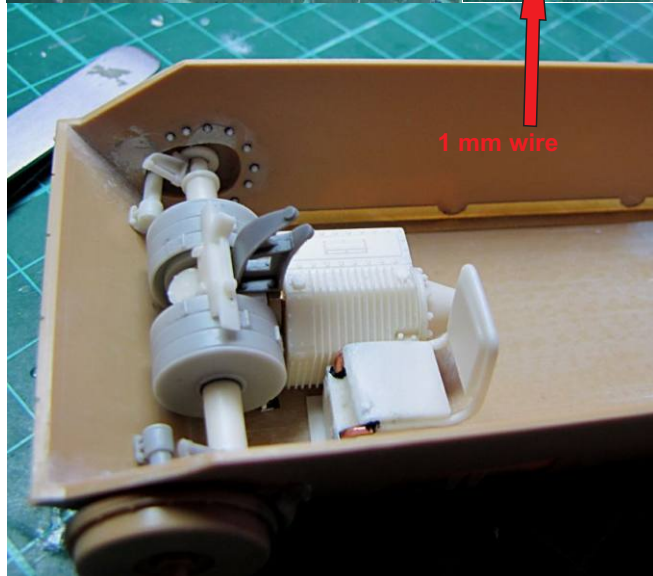
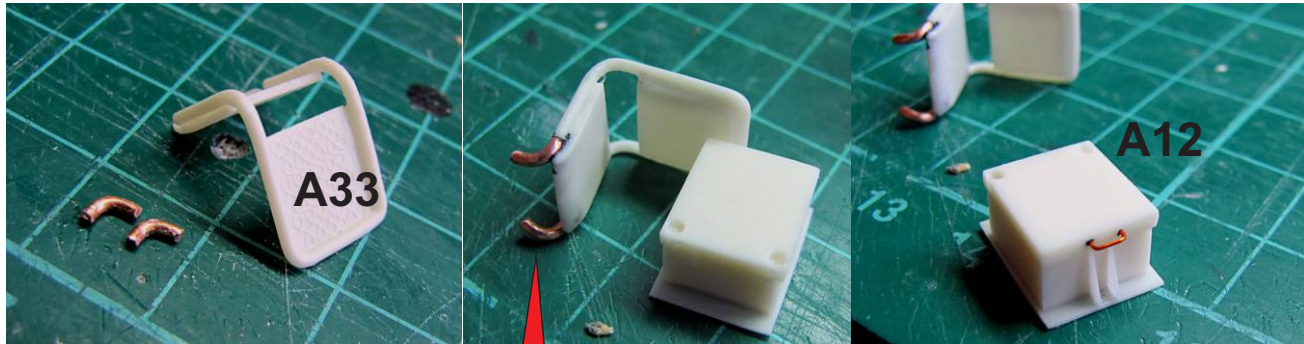


**g f**



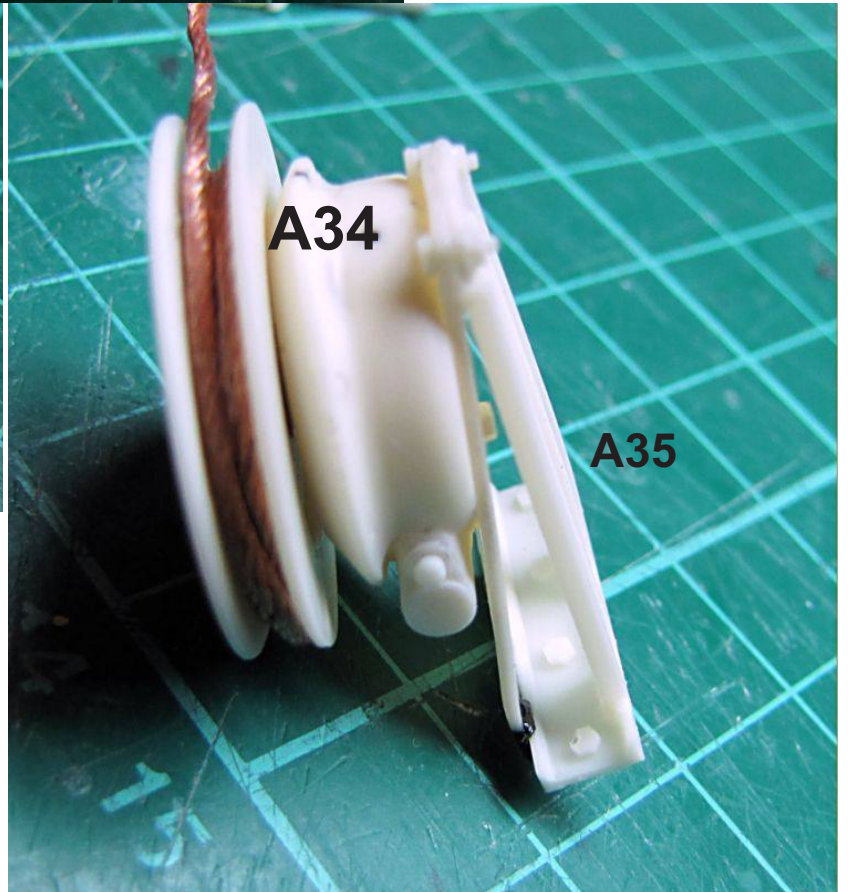
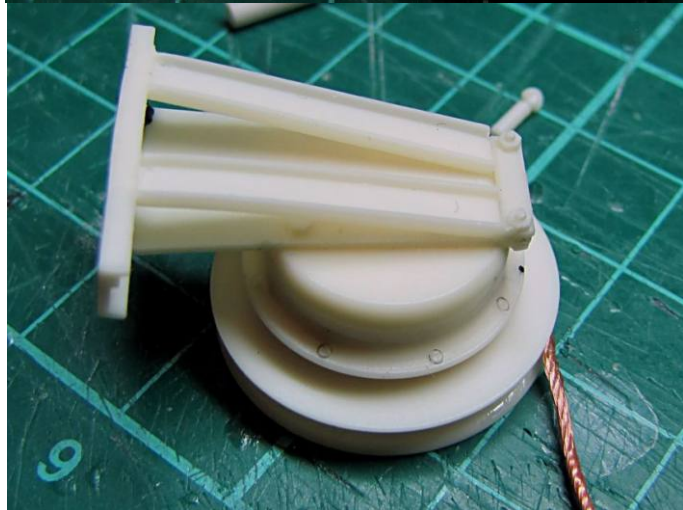
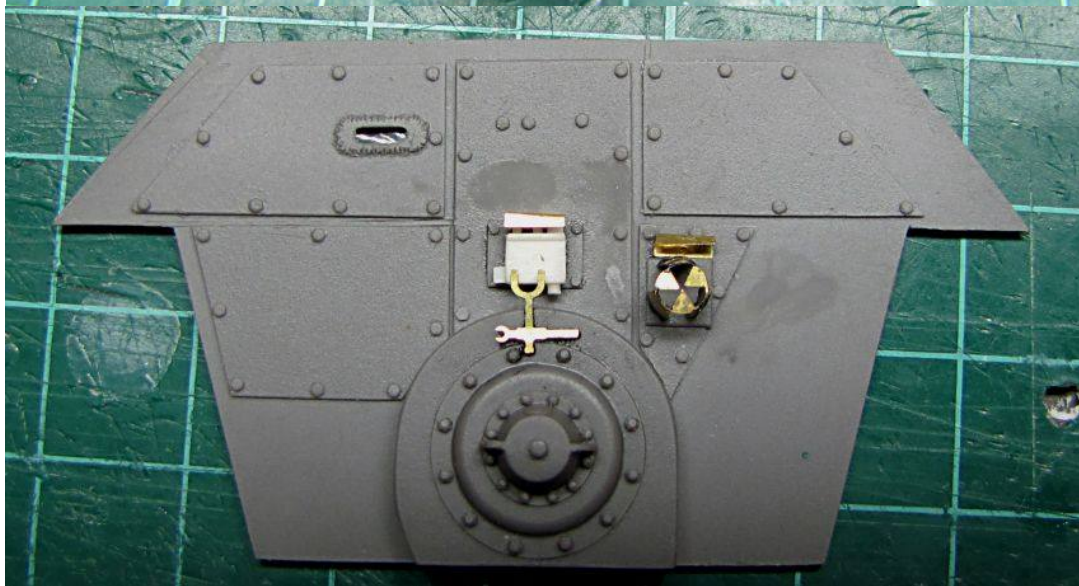
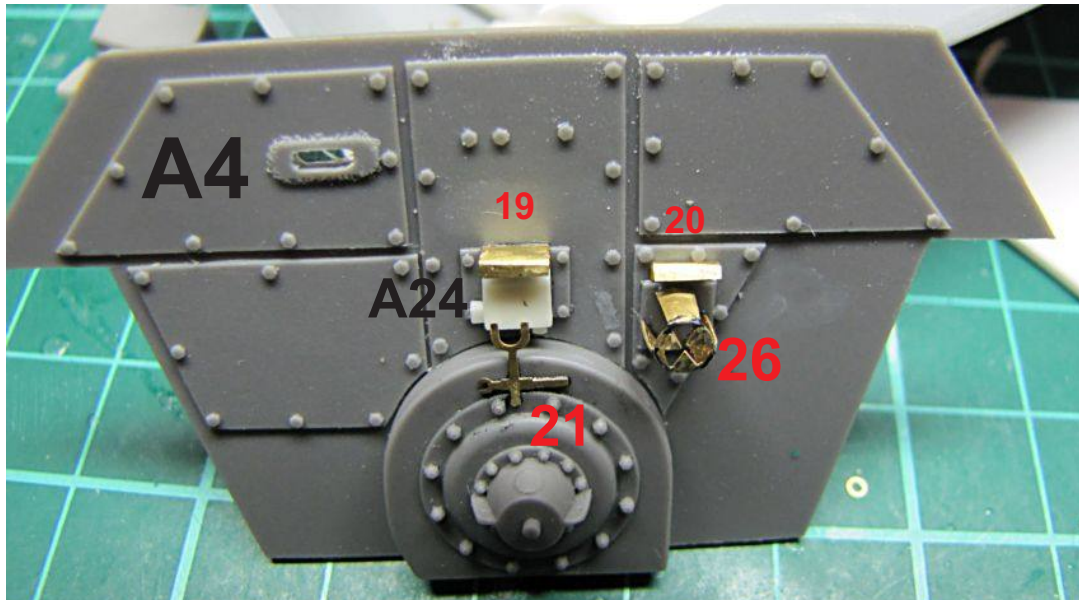


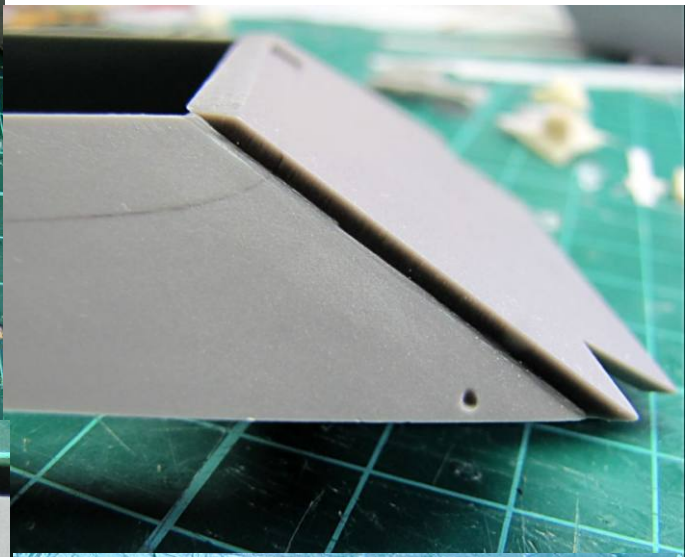
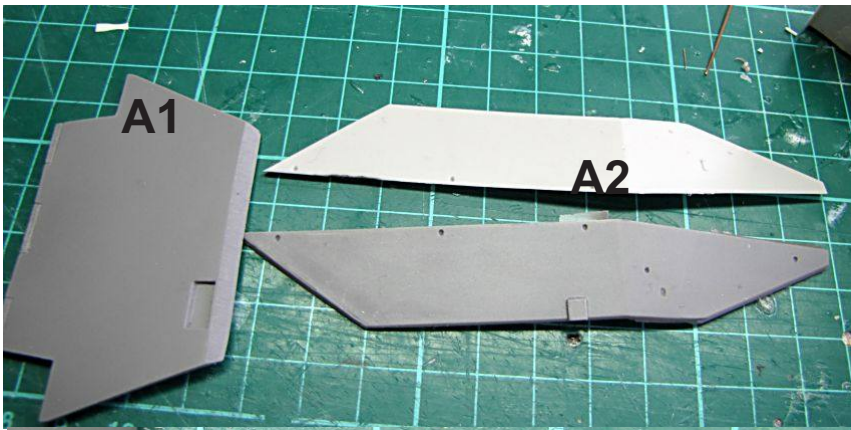
I used 1,2mm drill bit to enlarge holes on the top of the box - just to make seat assembly even easier. 0,3mm wire was used to make a handle at rear side - then I glued parts together.





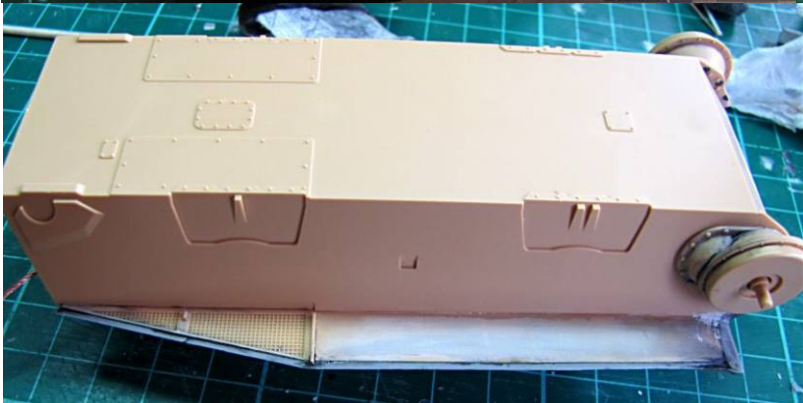
Details added on the rear wall and the winch assembled together

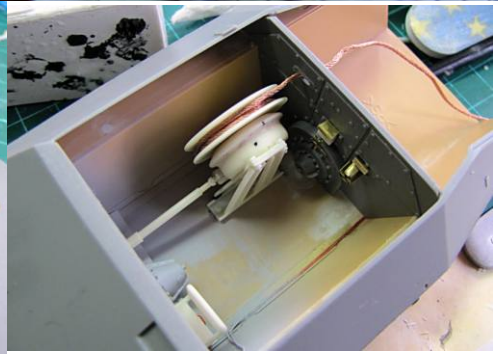
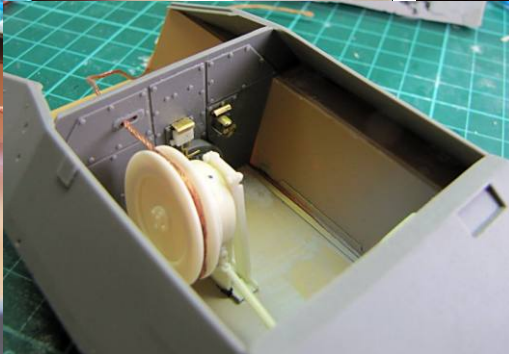
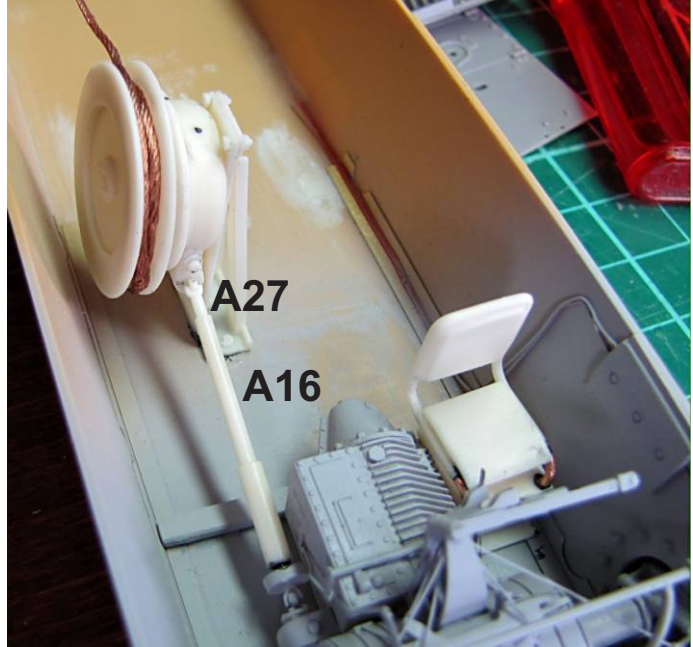
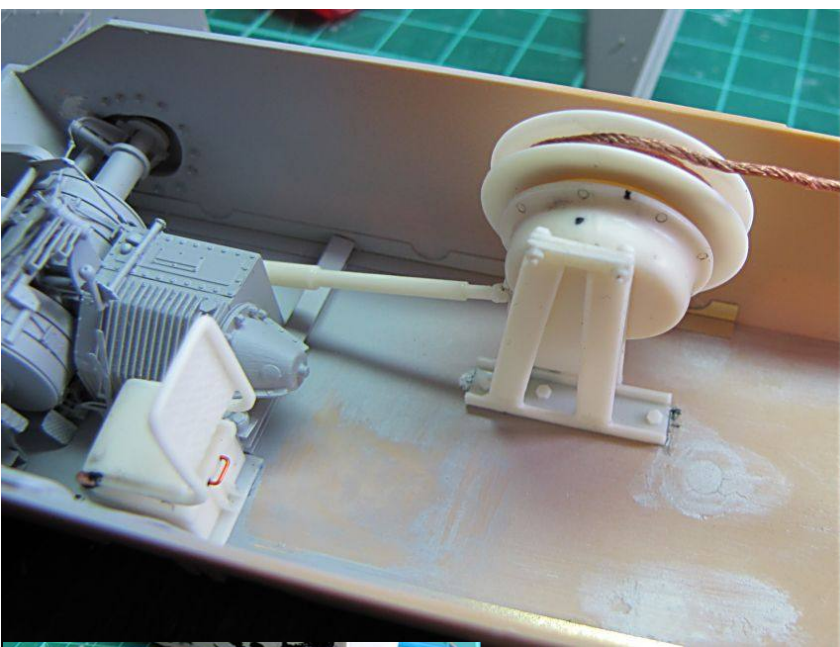




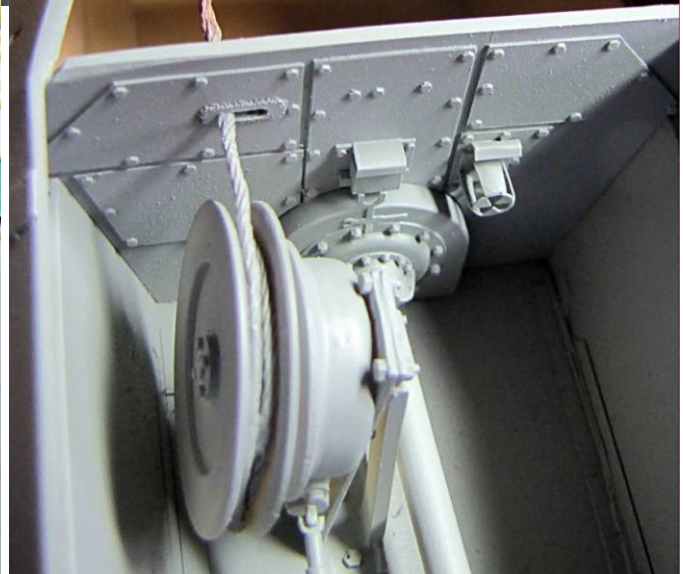
Optional gun mountings for inner sidewalls

Upper hull is easy to glue together and work with in one piece, but some guys might prefer to assembly side walls one by one. They fit great on Tamiya kit, if Dragon's one (grey) is used, some more filling and sanding will be needed as shown in pictures - anyway, this kind of work is a need if worked with any conversion sets I have seen (and often when building many OTTB plastic kit)

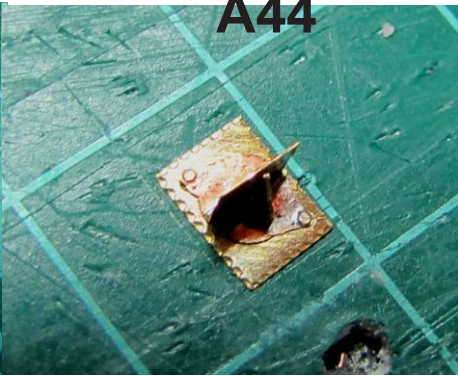
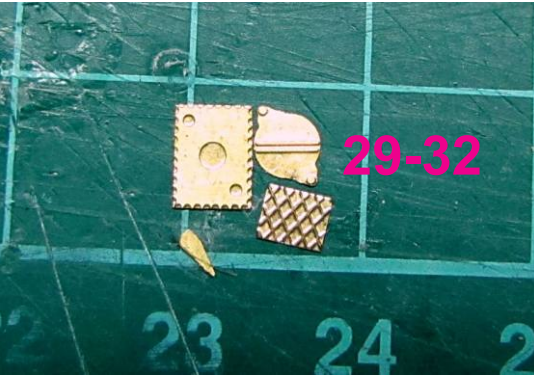
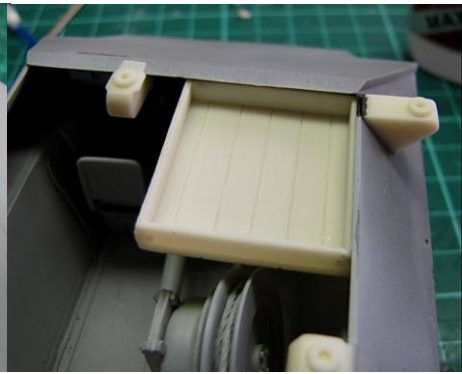
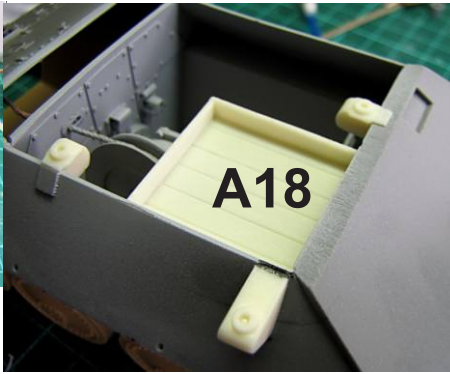
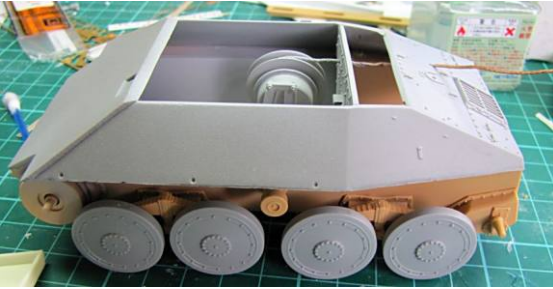




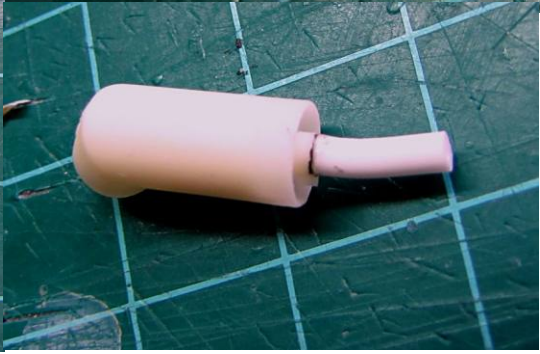
Now the winch is assembled and connected with the gear box (its shaft has to be cut to required length, depending how accurate was previous work)  
The rear wall added, and the main transmission shaft stuck in between (there are little holes on both ends, I just used bigger drilling bit to get comfortable assembly with the pins provided on opposite parts ).  
Once again small filling and sanding might be needed around the back wall and on the plastic edges of the lower hull. Now the interior is almost completed.

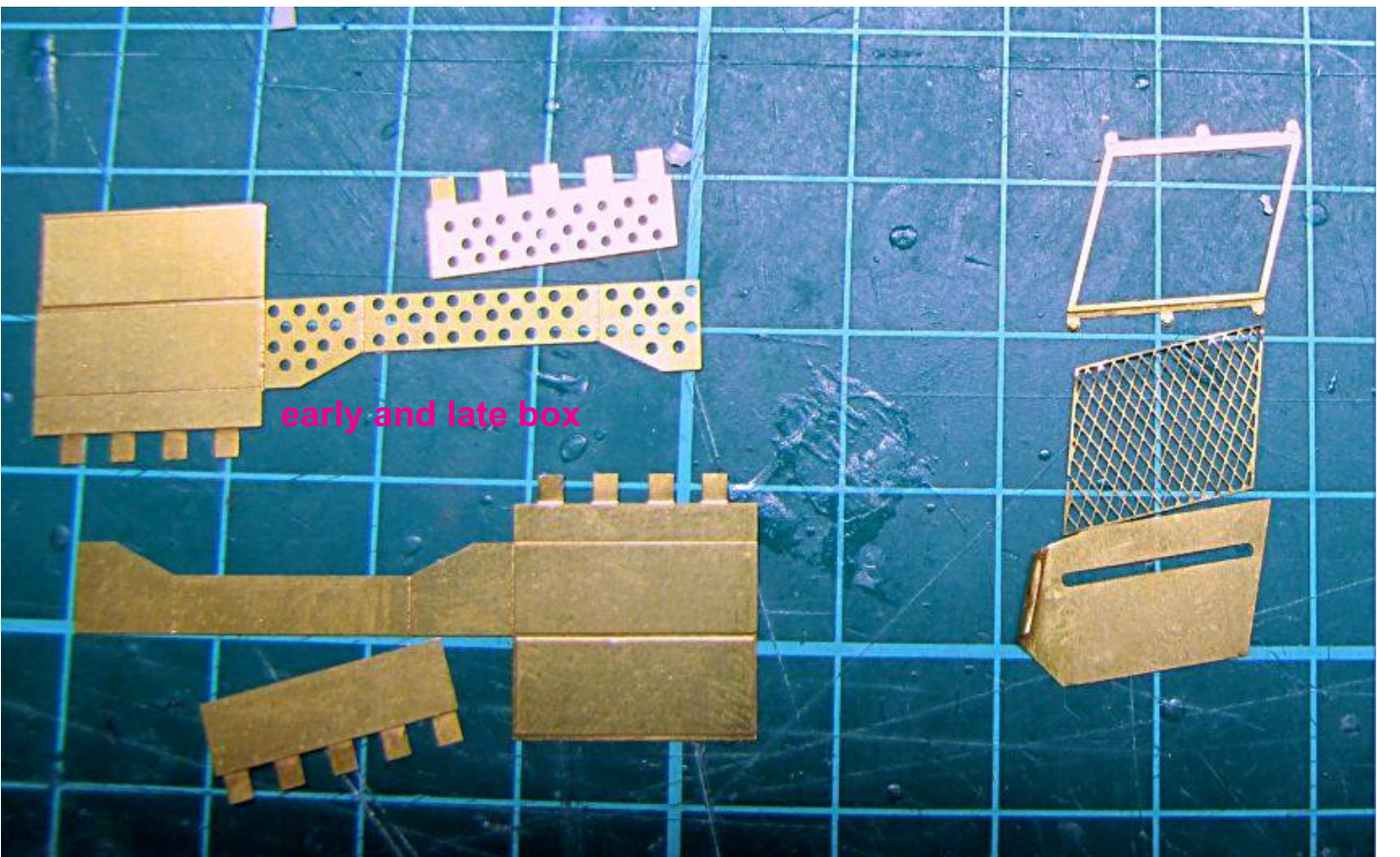
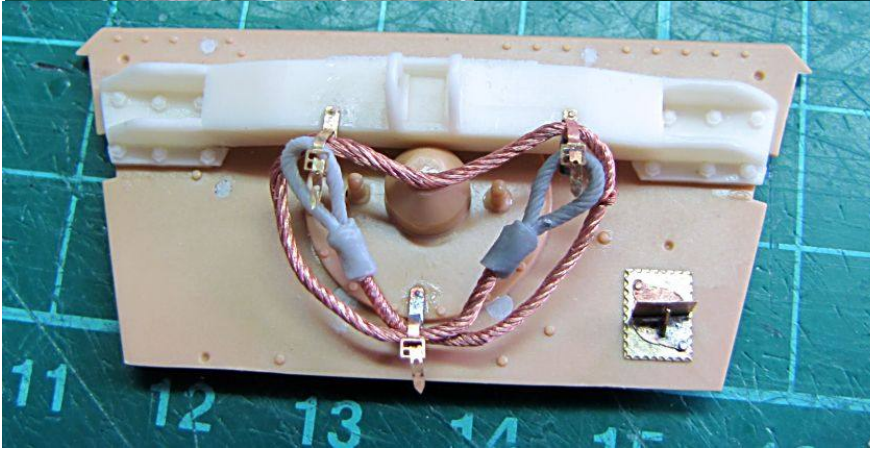
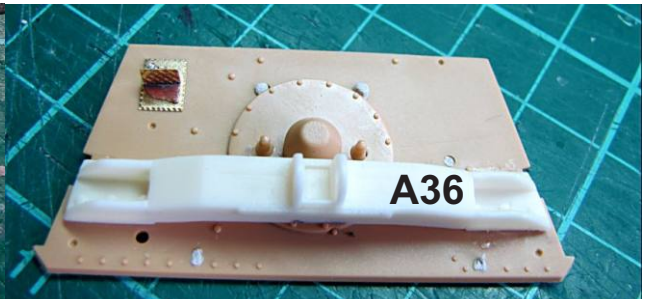
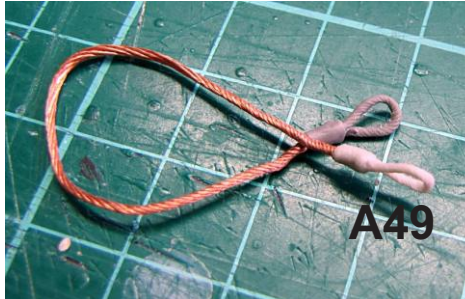
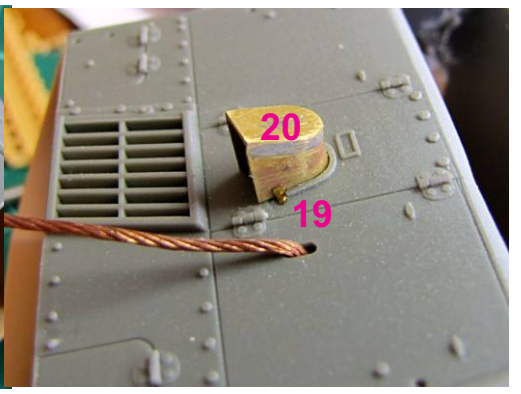
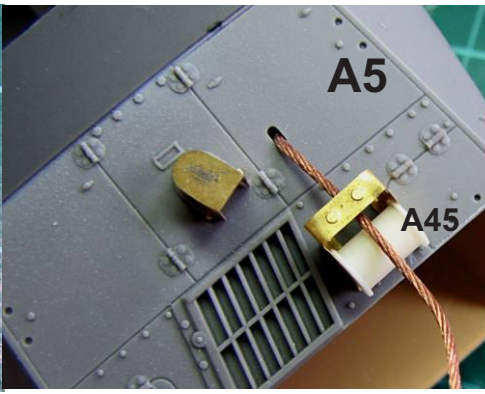
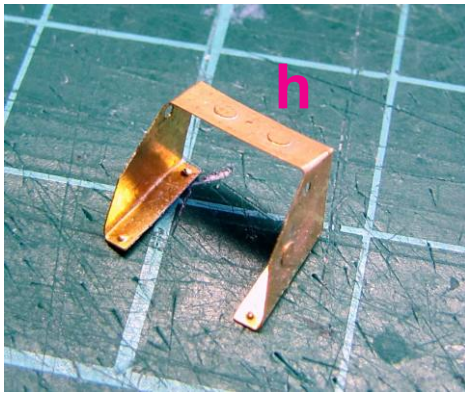


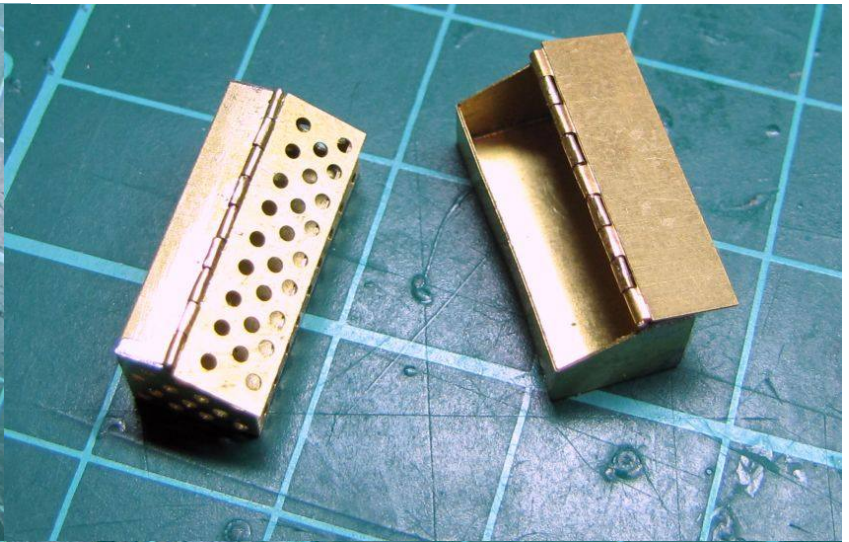
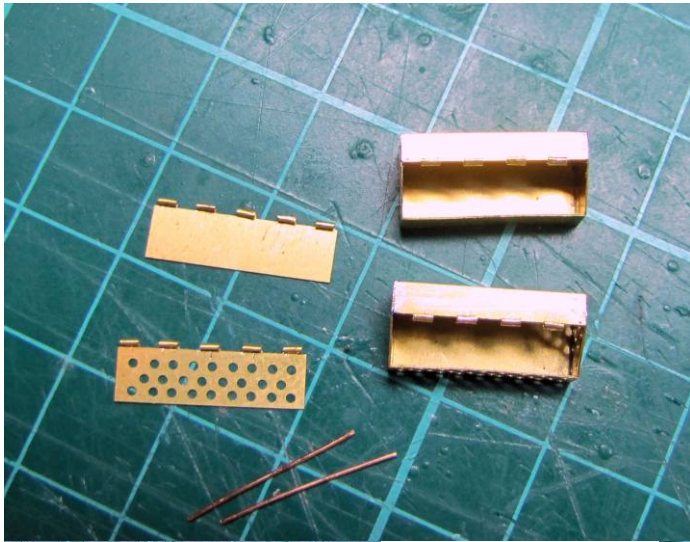
I did some work on the kit itself, completed most of suspensions, added wheels and got ready more conversion parts for assembly. Now crane attachment bases are mounted on the upper hull and a tray placed on its position.



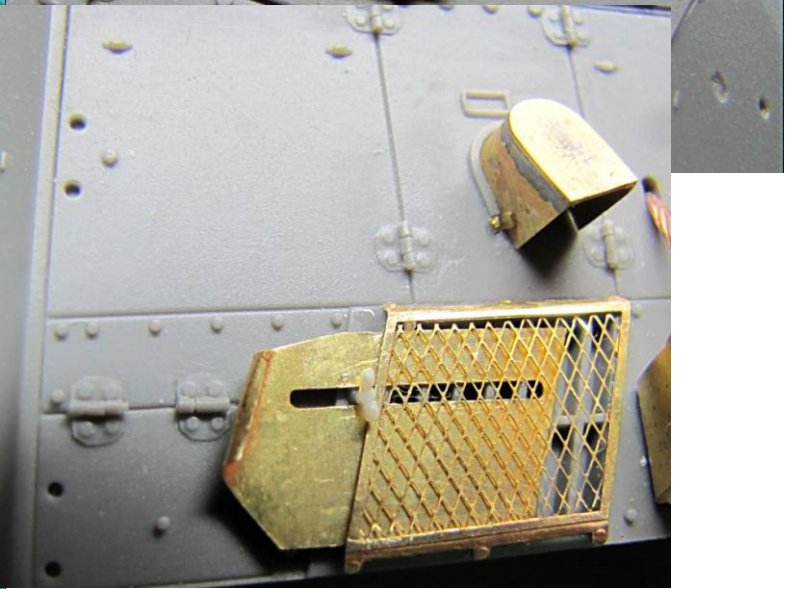
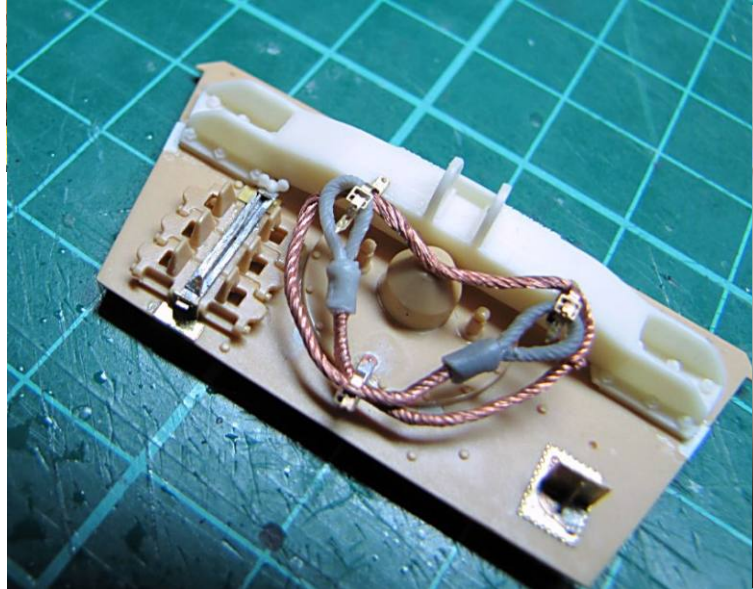
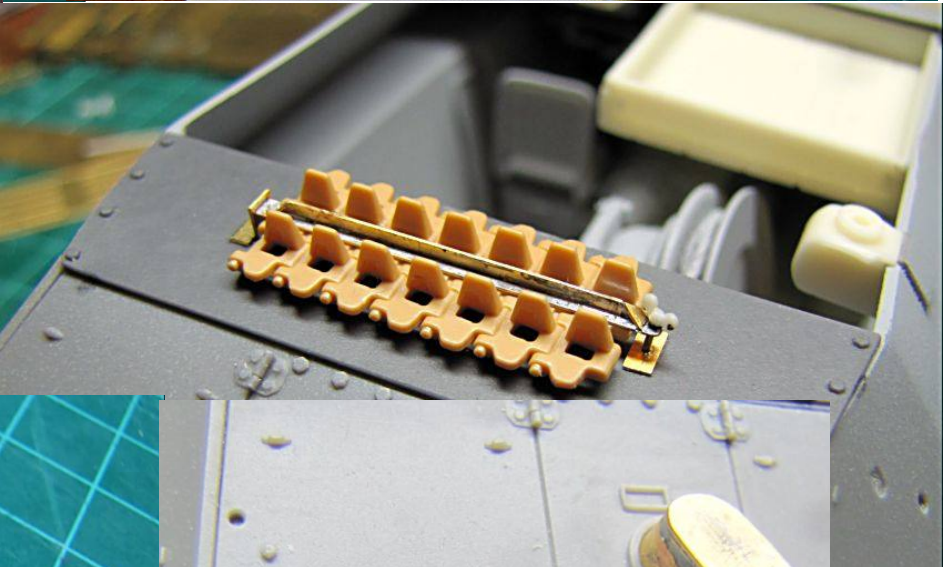
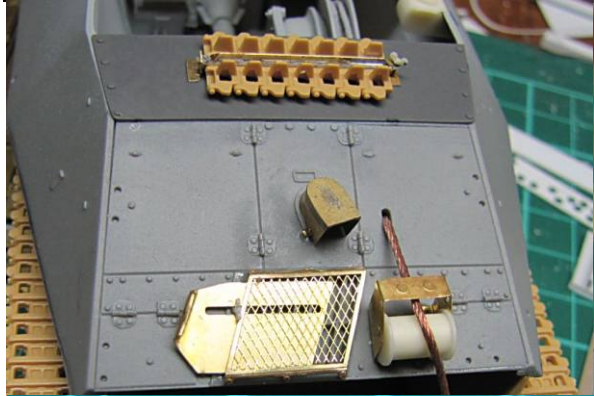
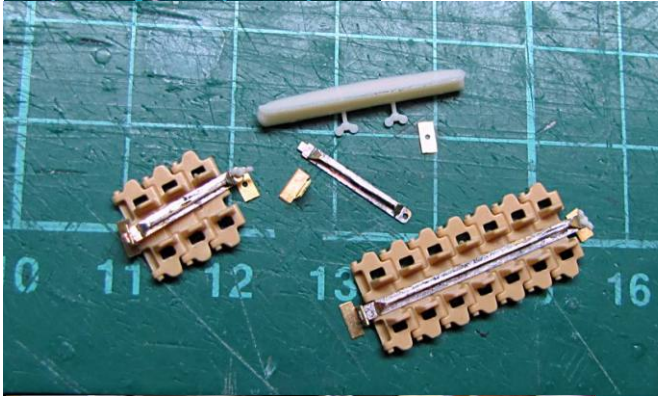
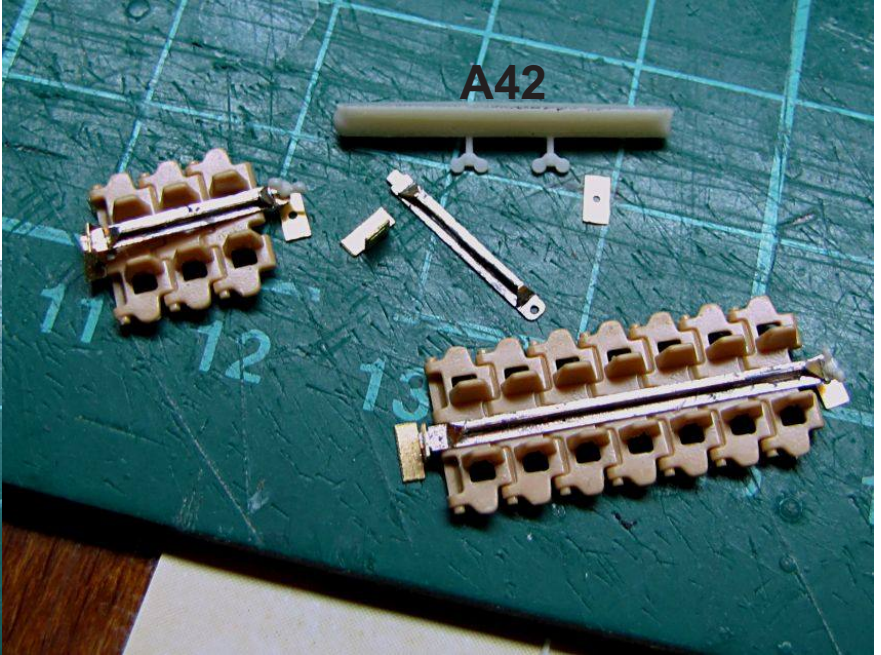
Many PE parts are included to upgrade the build, but often plastic parts provided in the kits can be simply used instead, depending on everybody's personal taste

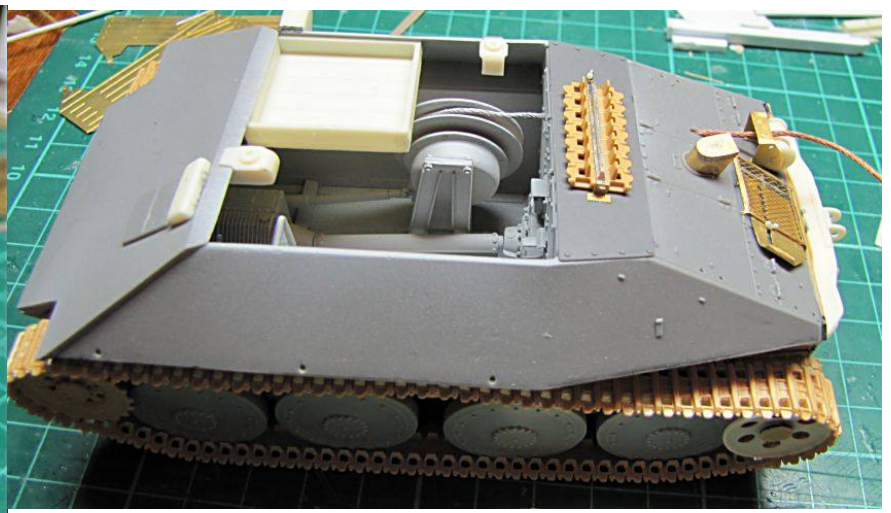
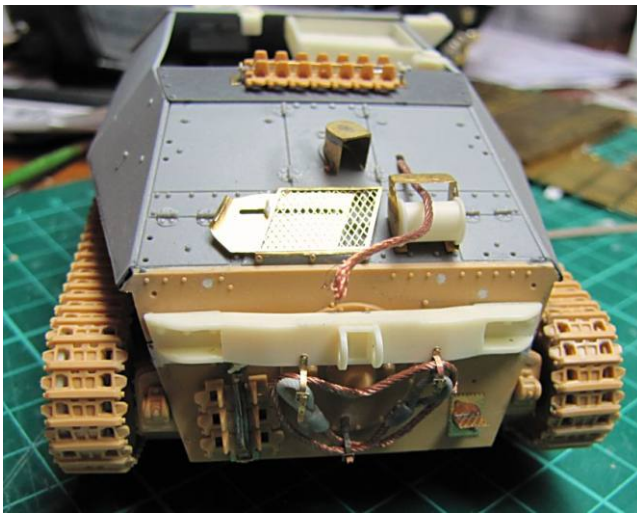




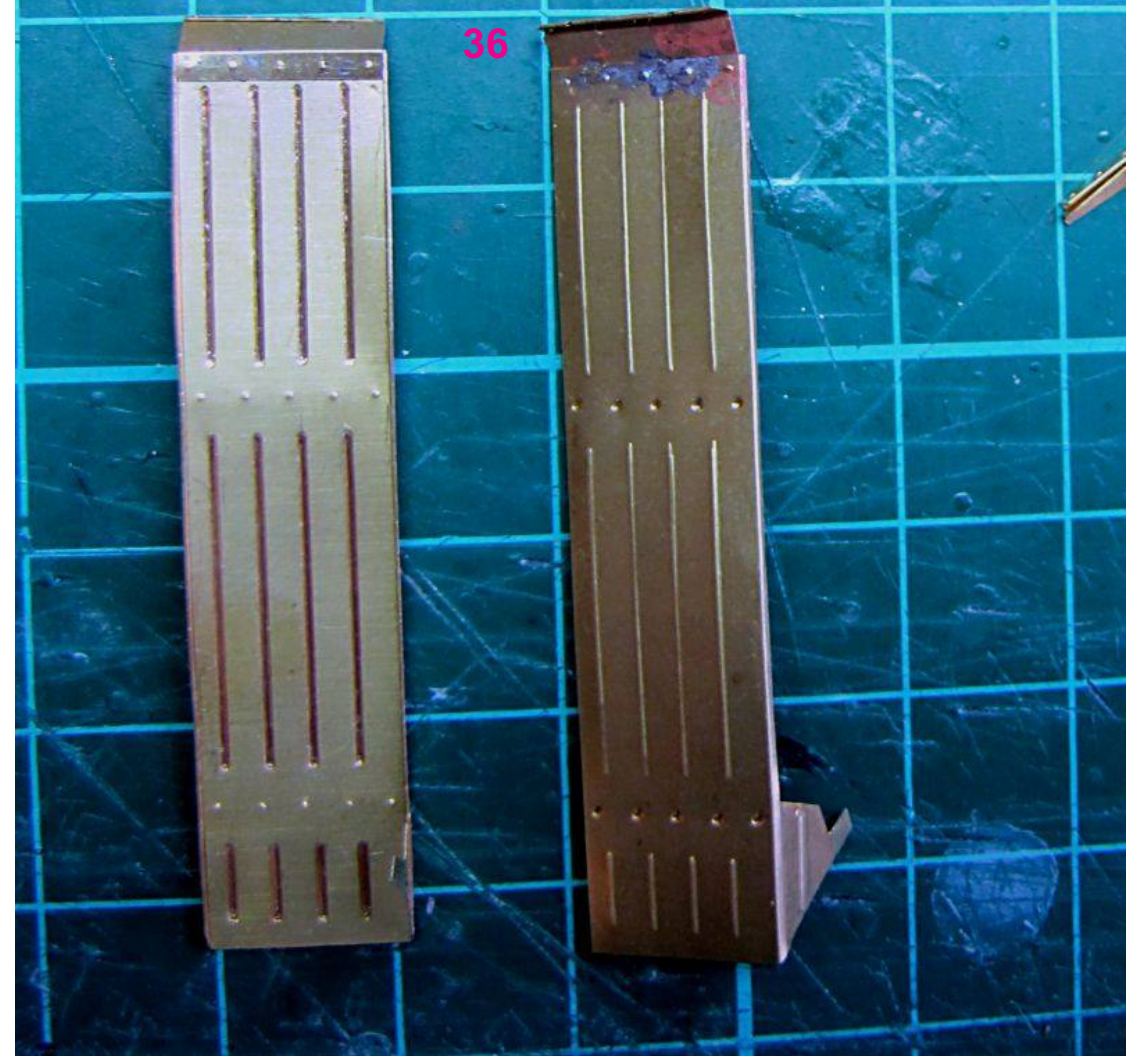
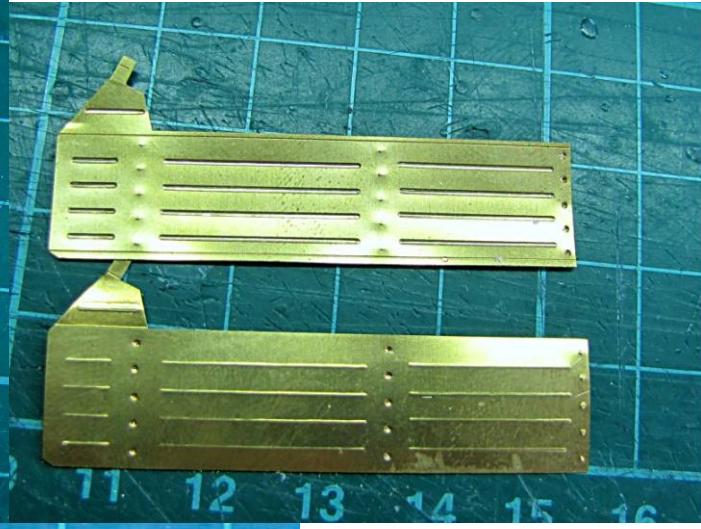
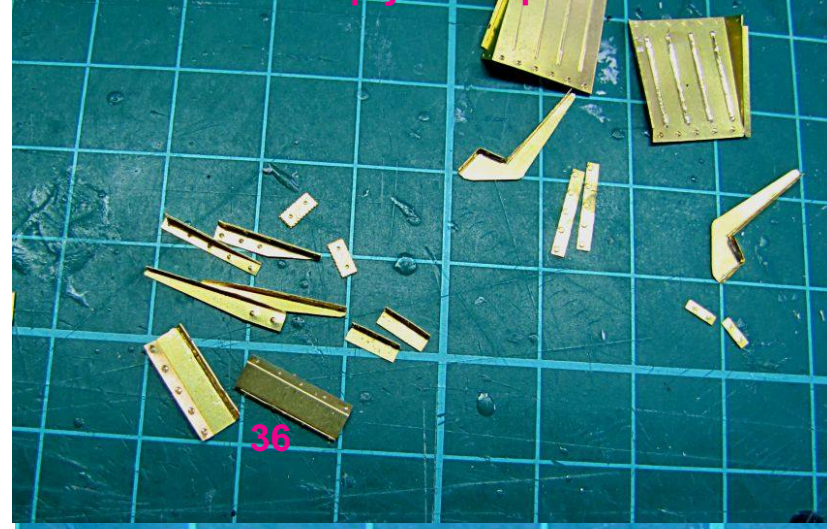


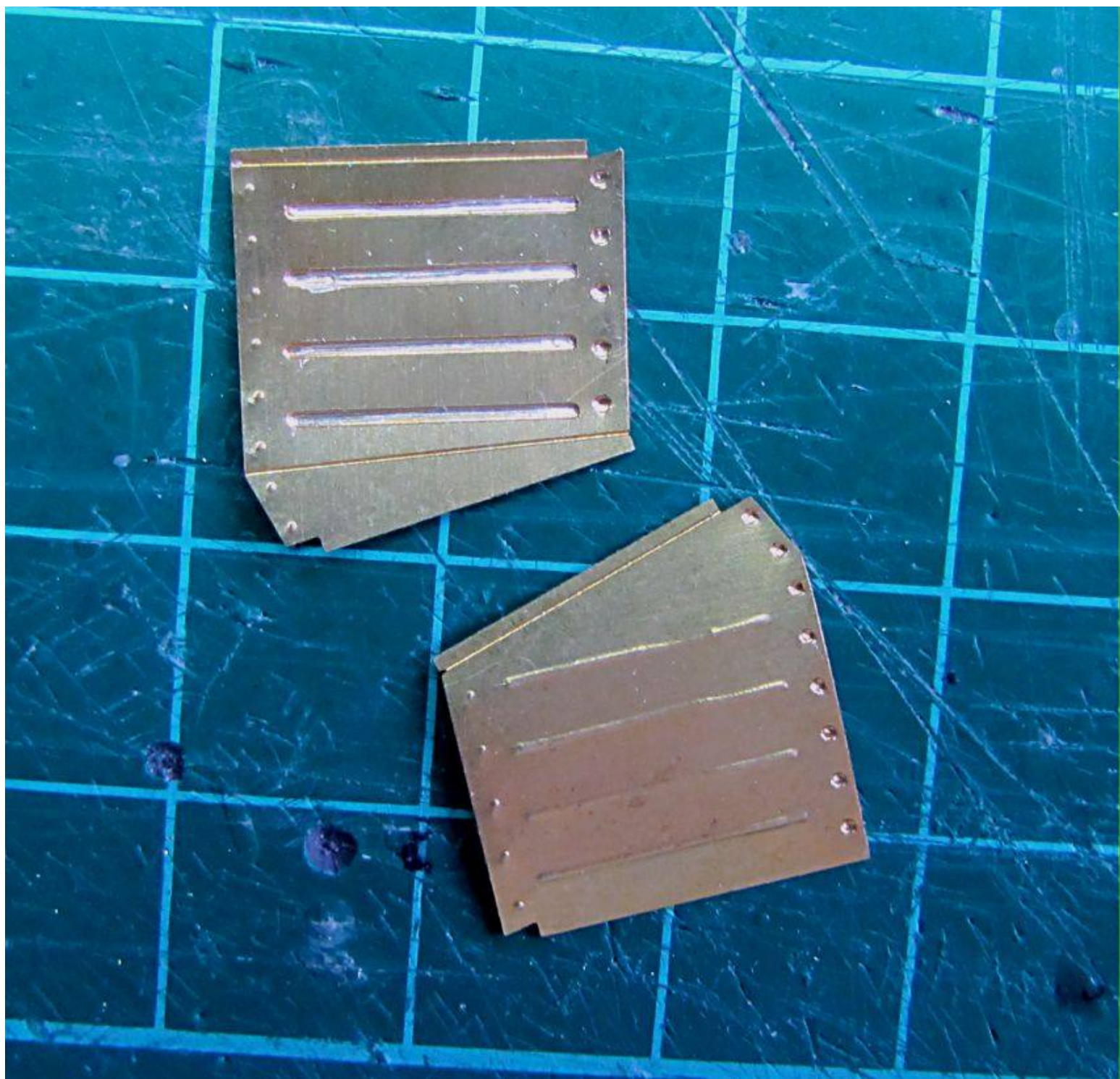
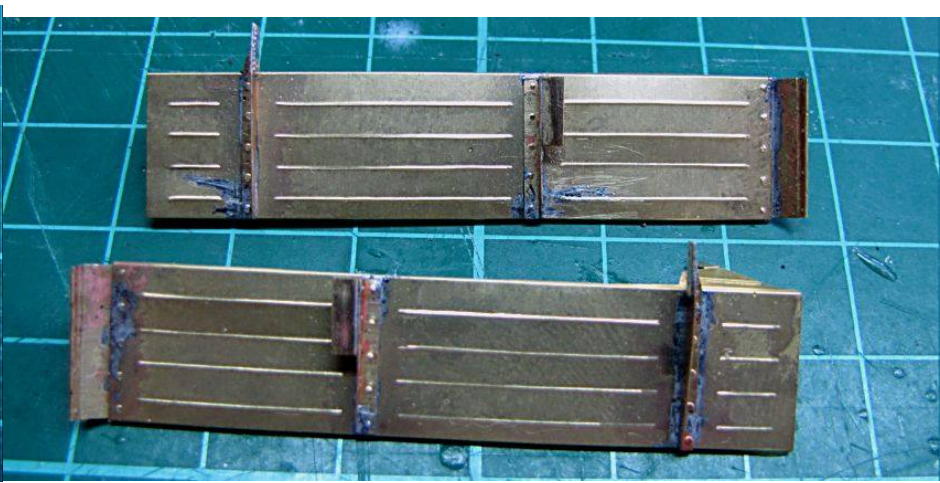
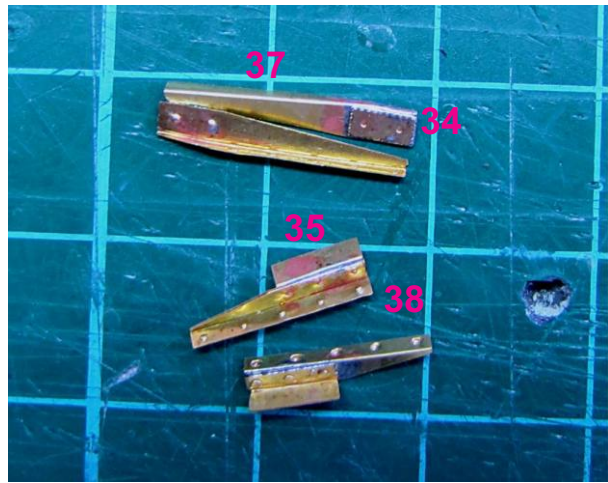
23-28



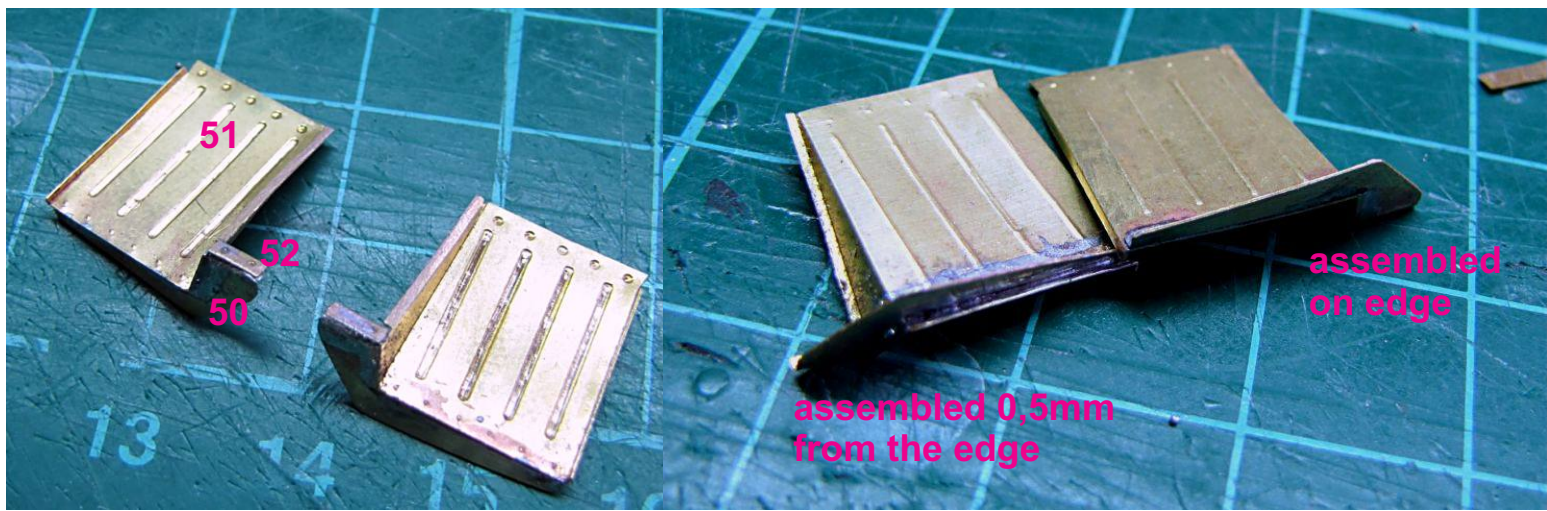


Rivets and lines are always pushed from the etched off side to another, using any suitable tool or simply a ball pen









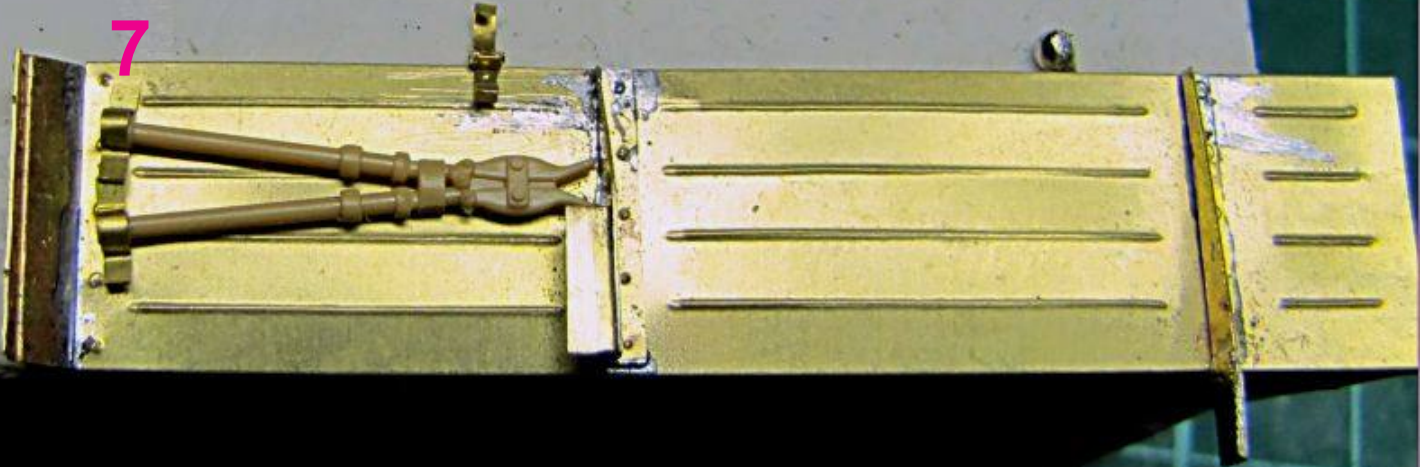
front mudguard - some vehicles had part 50 assembled on the edge, but some of them had it moved slightly to the back



9+10+11

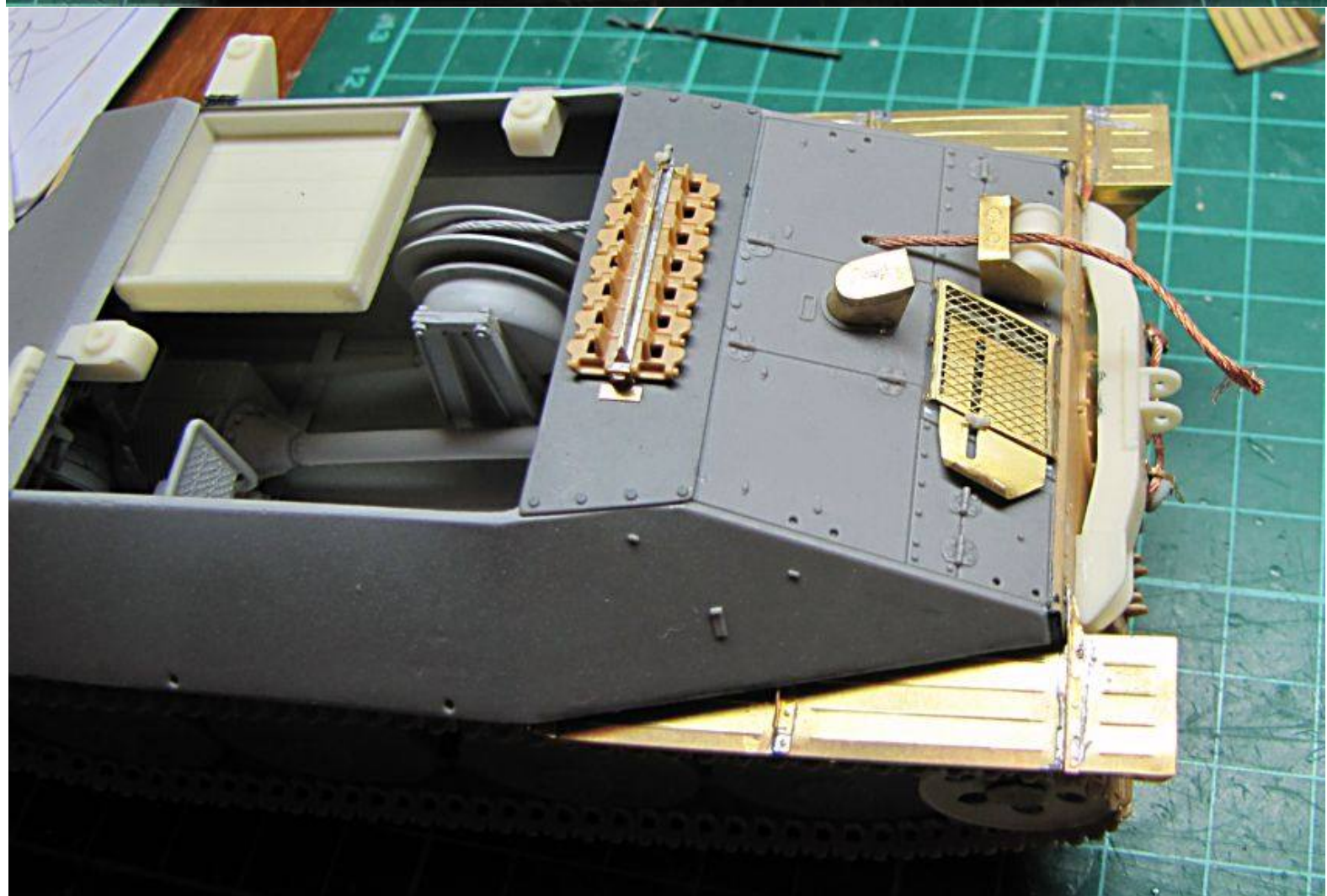
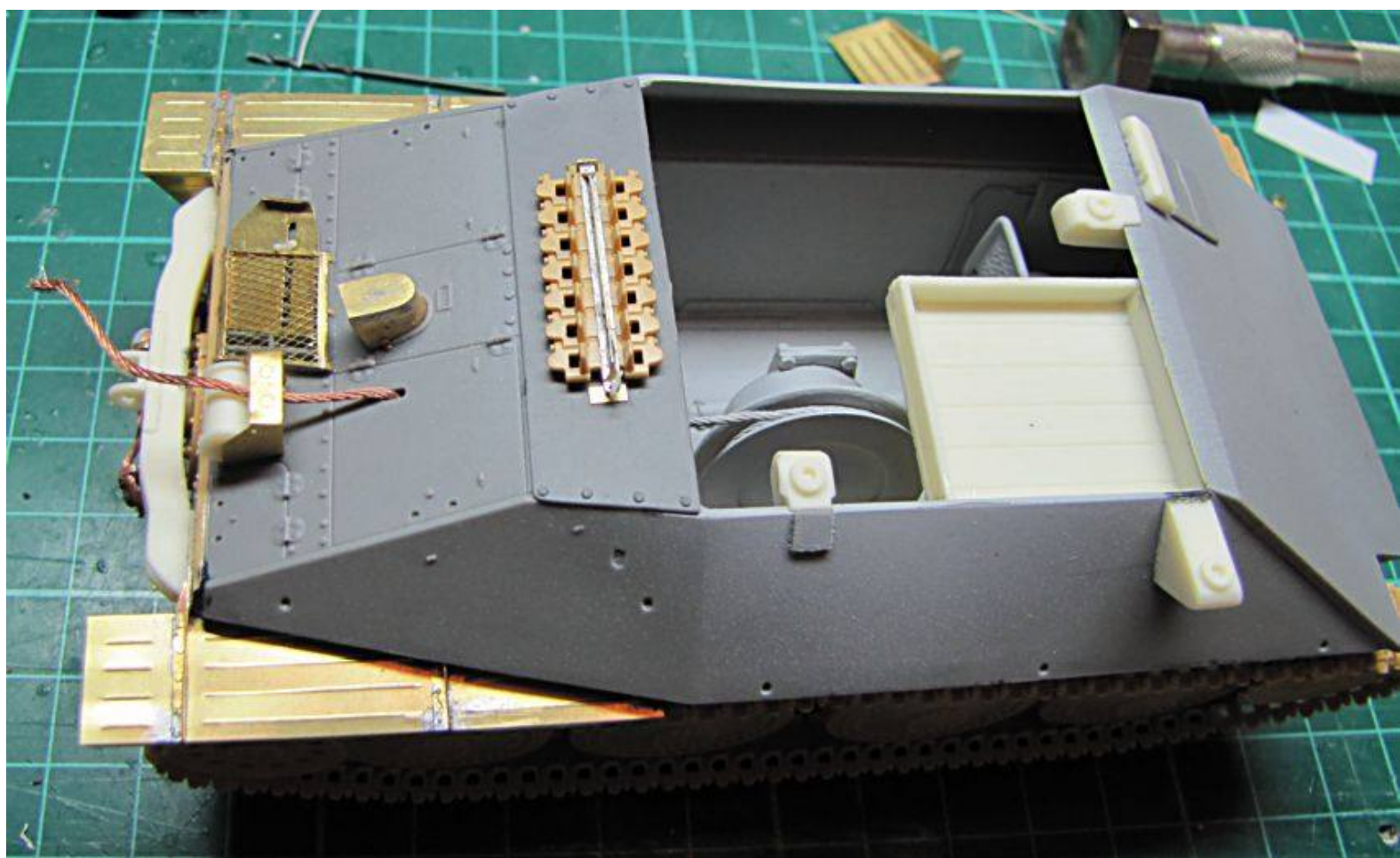


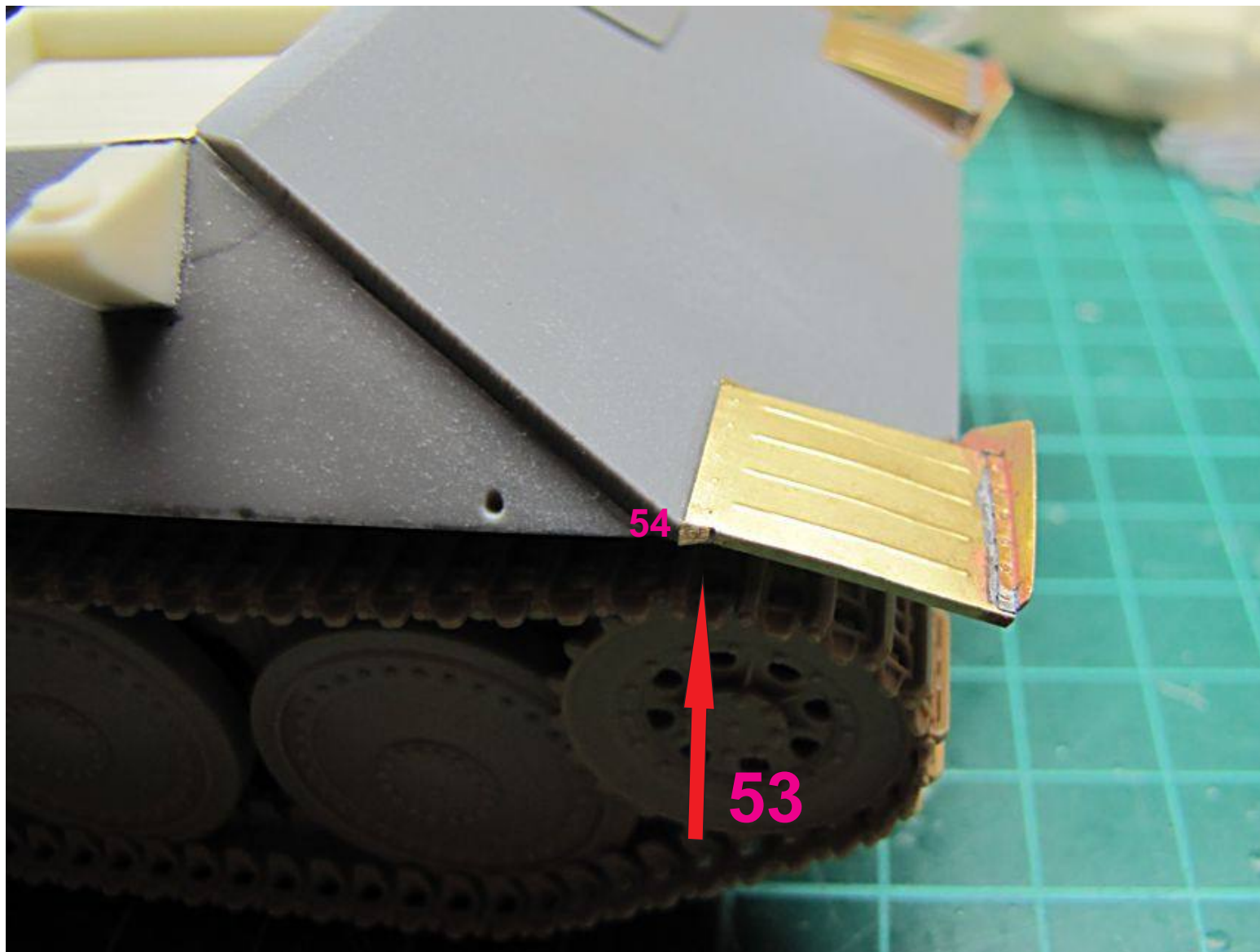
7

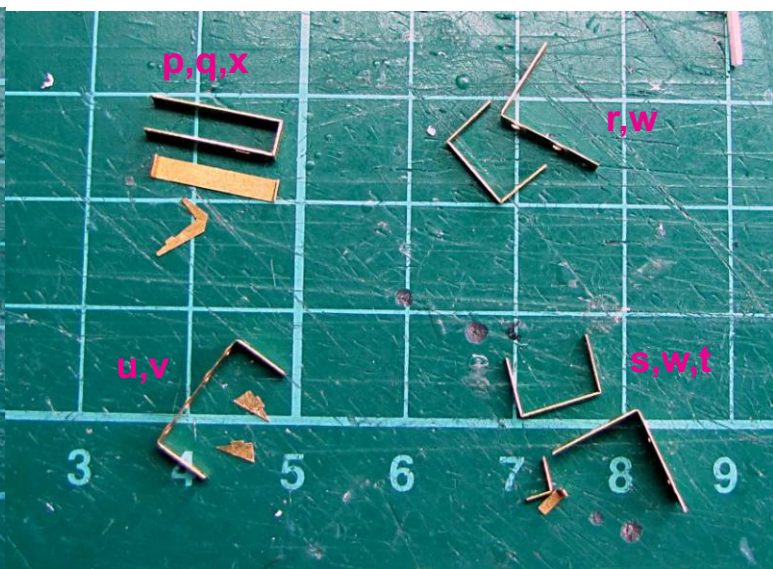


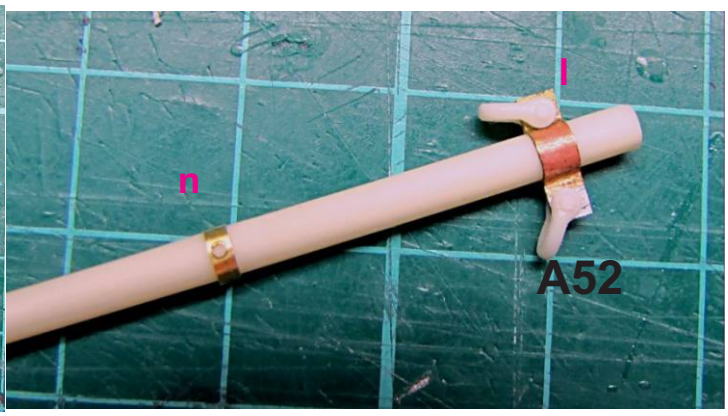
5



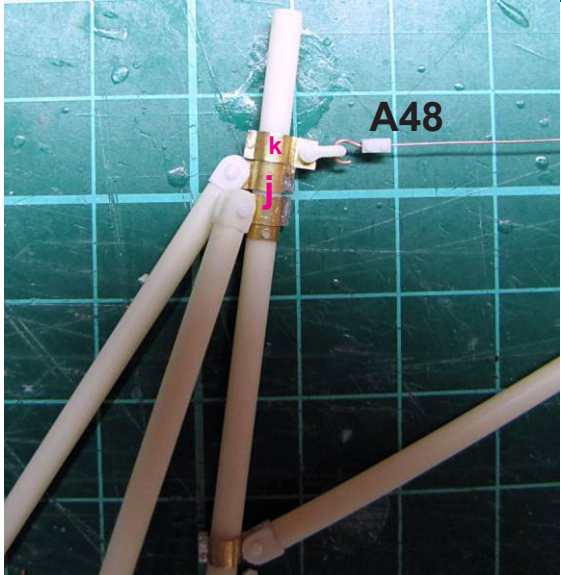
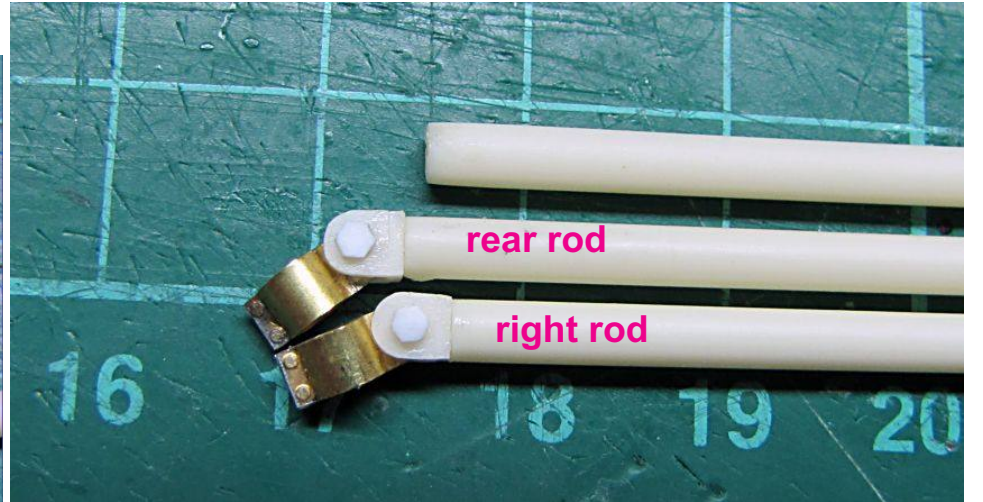
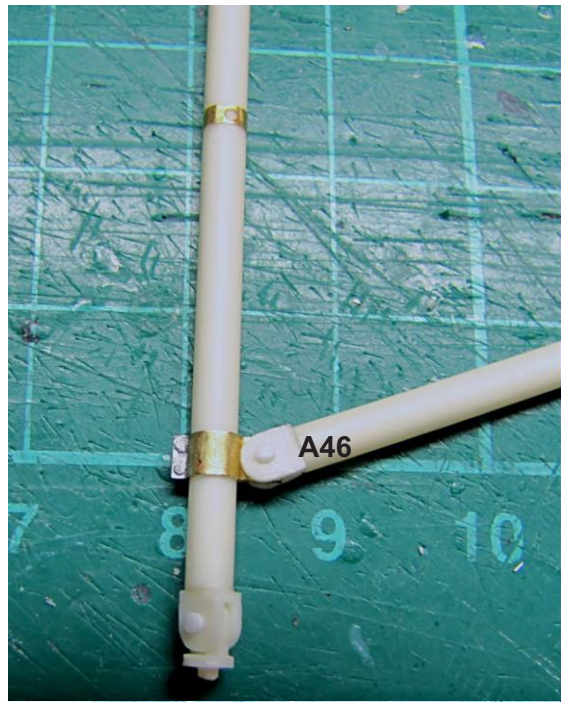


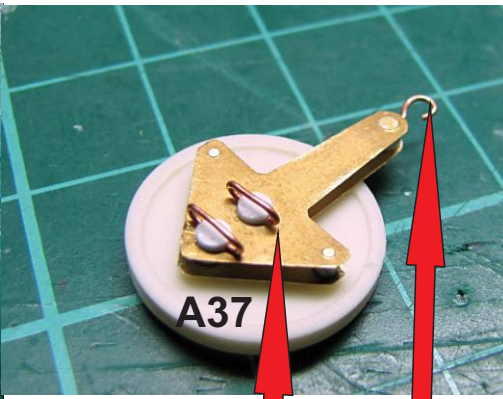




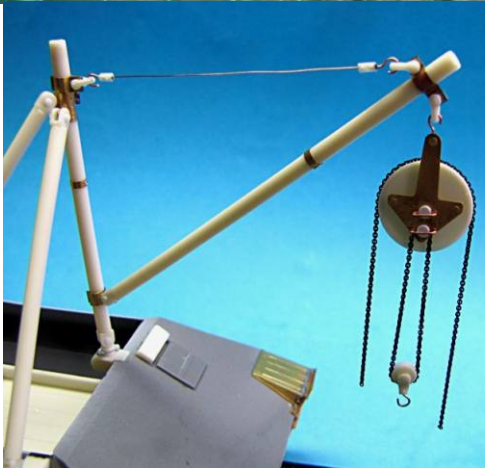
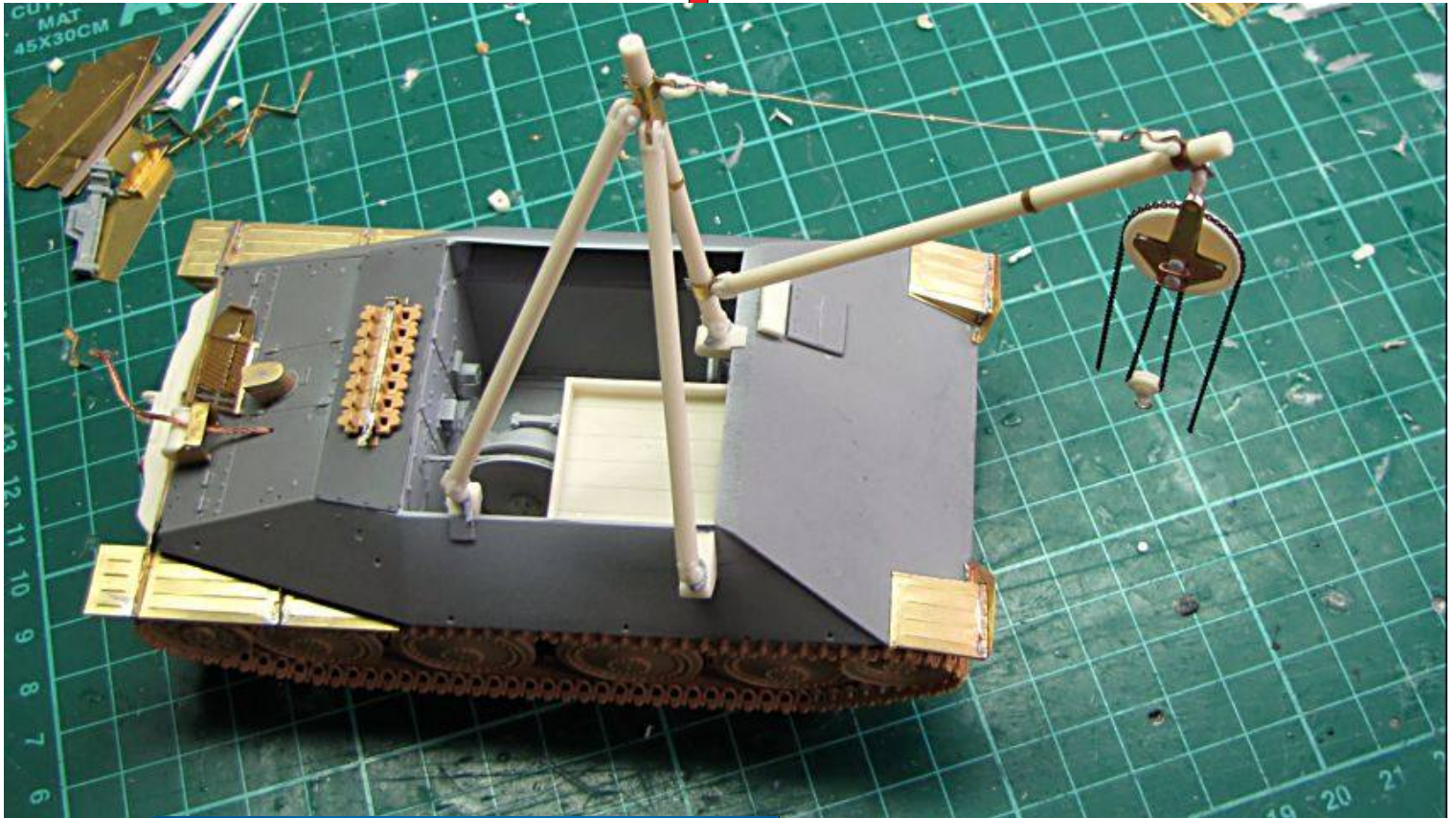


check the length of the rods



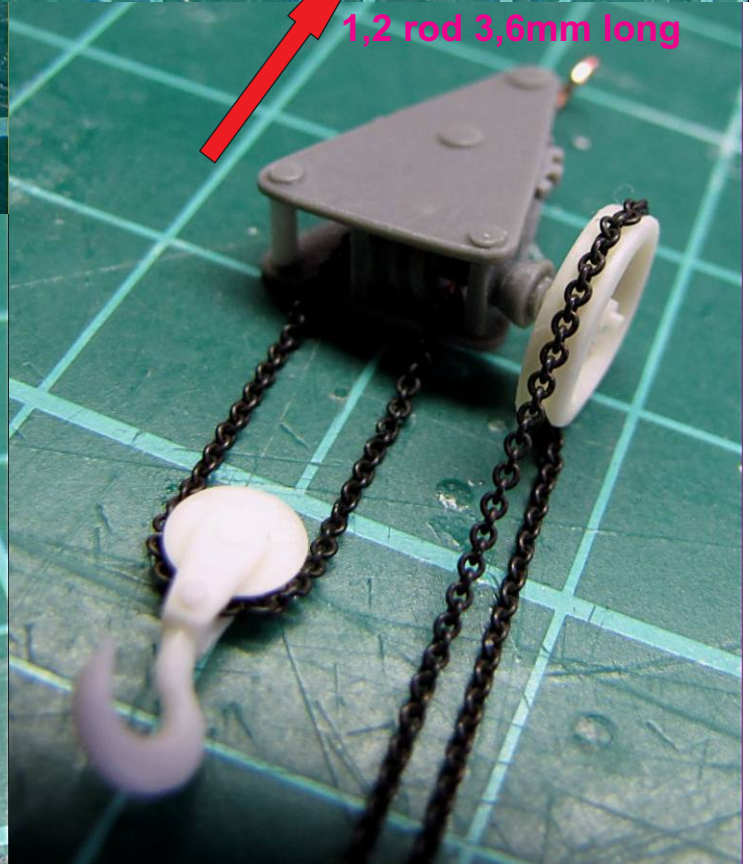
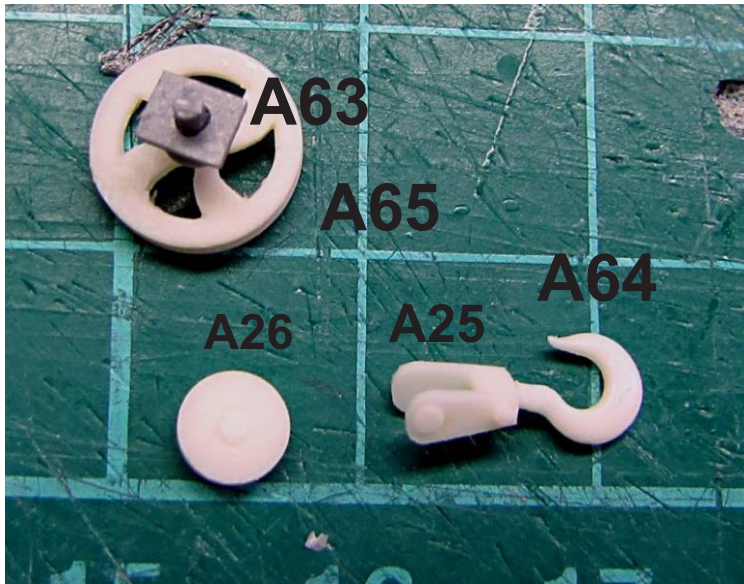


0,4mm wire

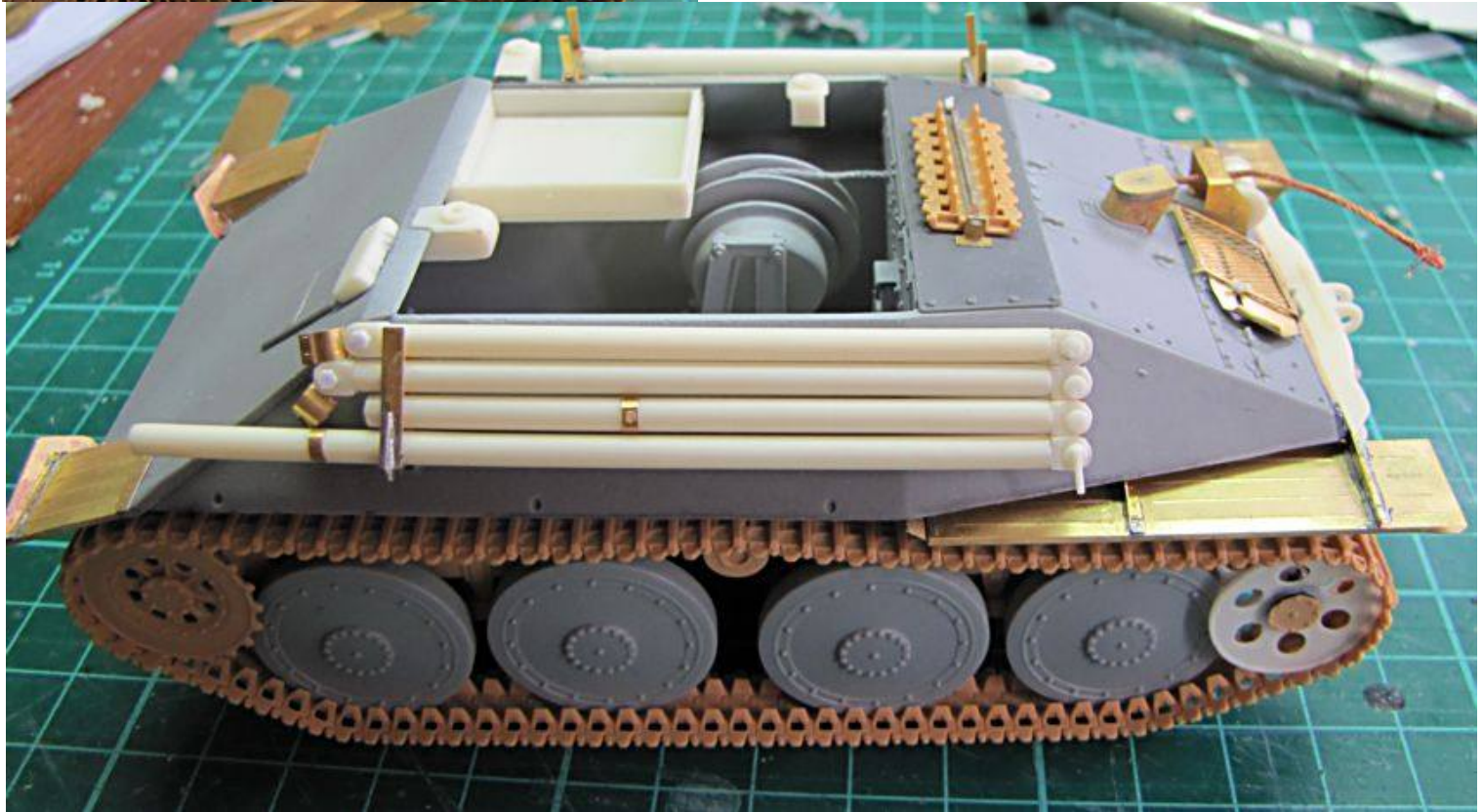
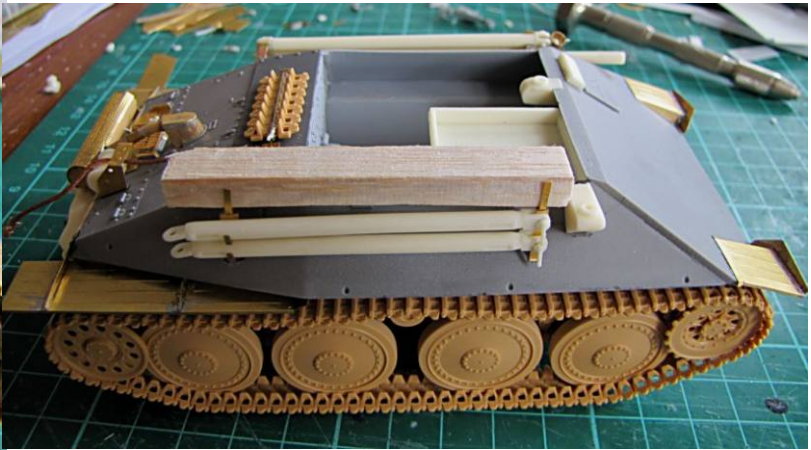
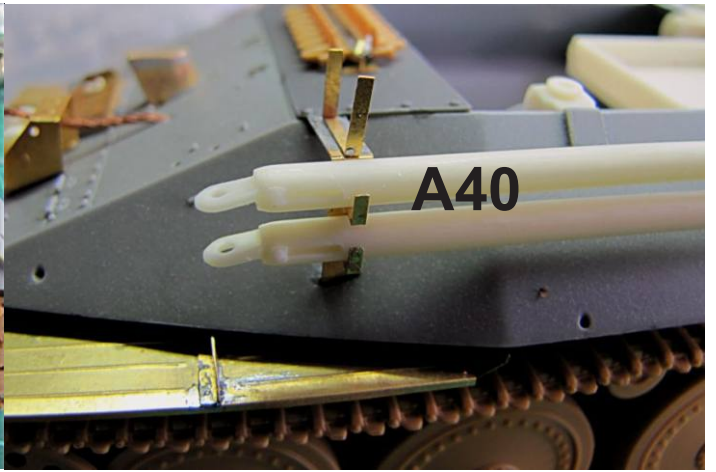
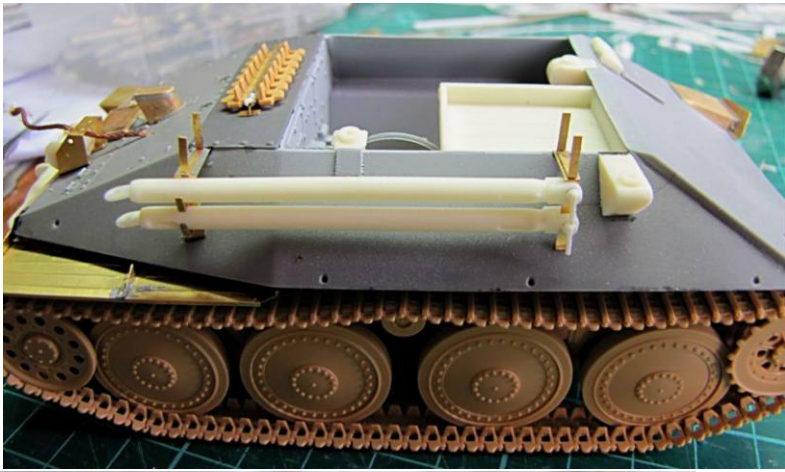


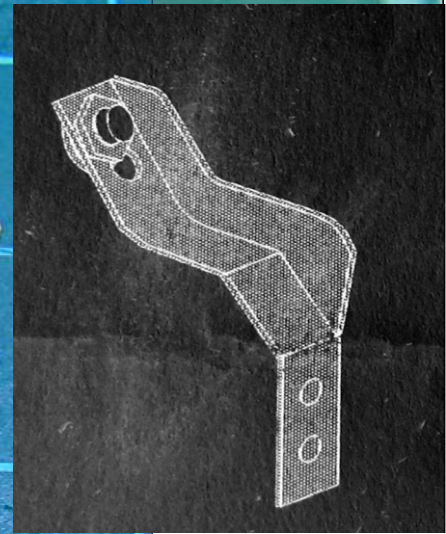
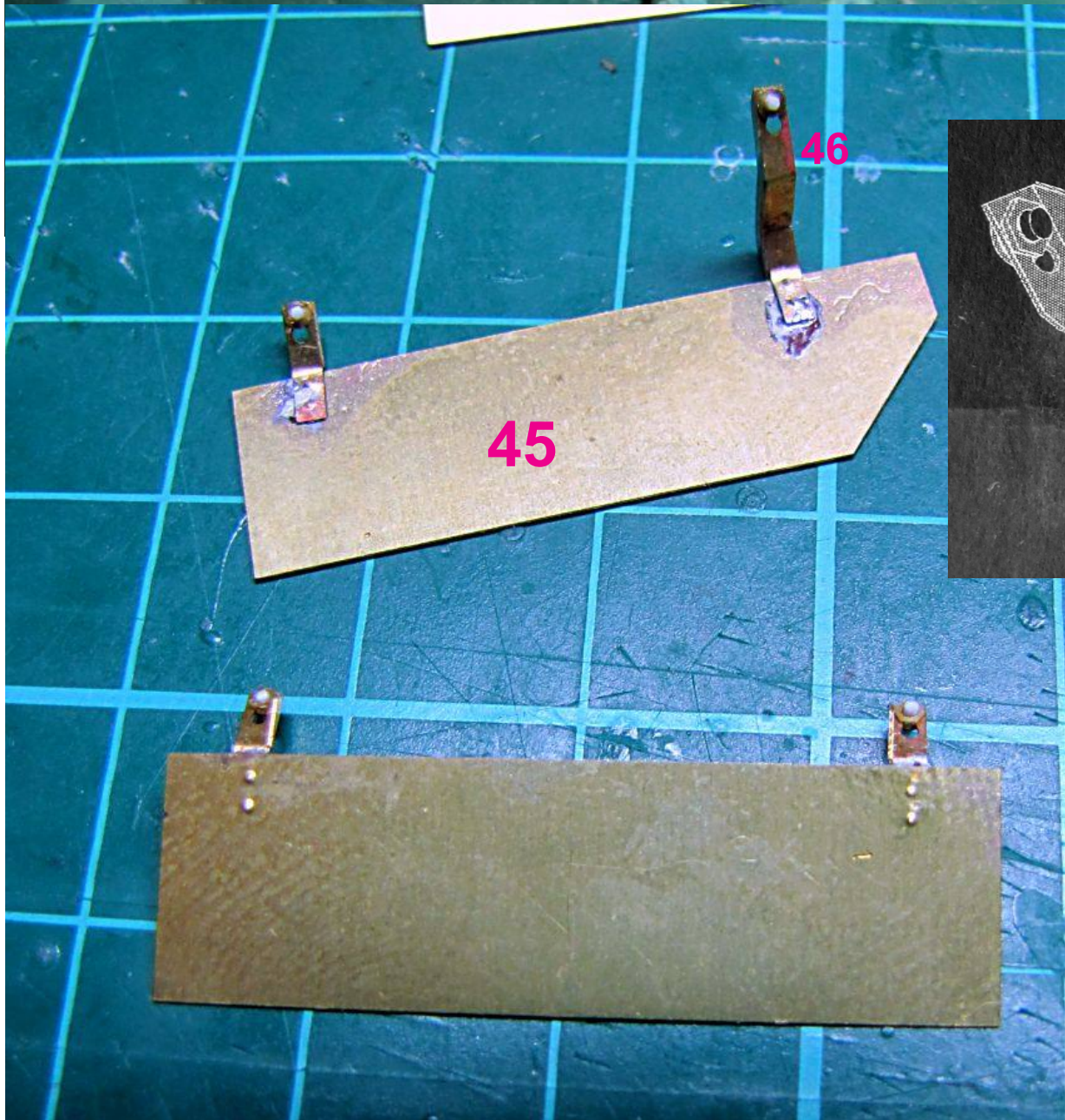
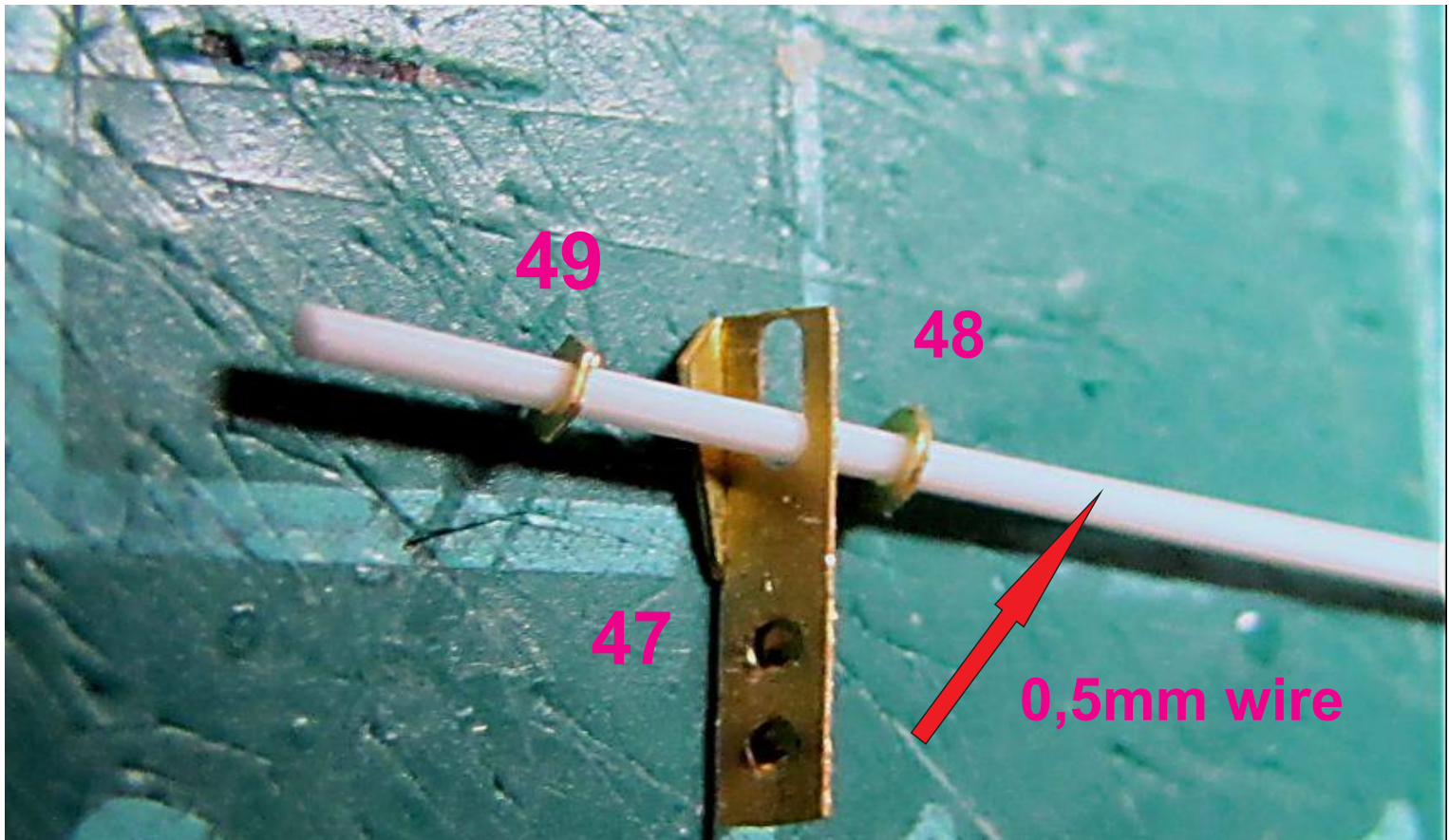
Some say this pulley was used only to release a vehicle trapped in the mud, but not as a part of the crane, but some references show also this pulley hung on the crane as seen in previous pictures.

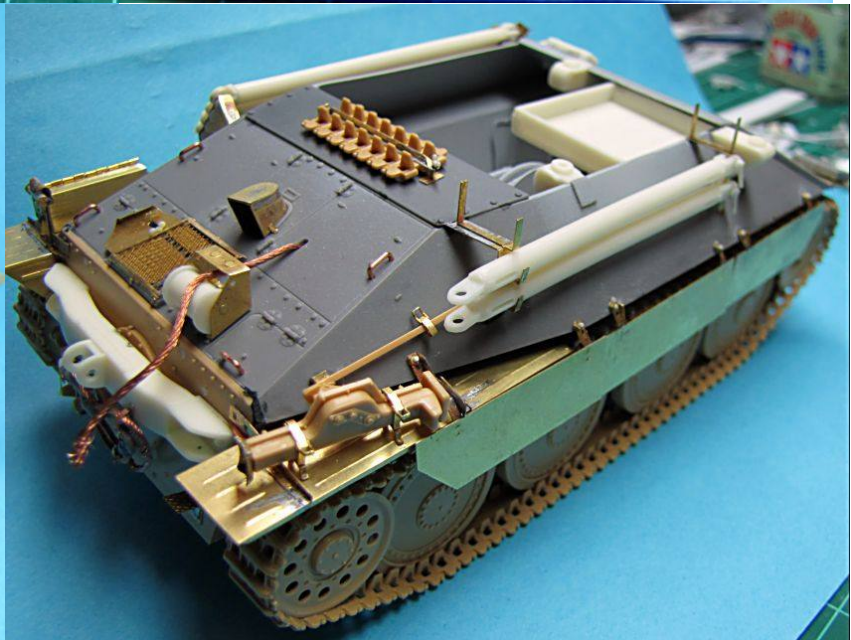
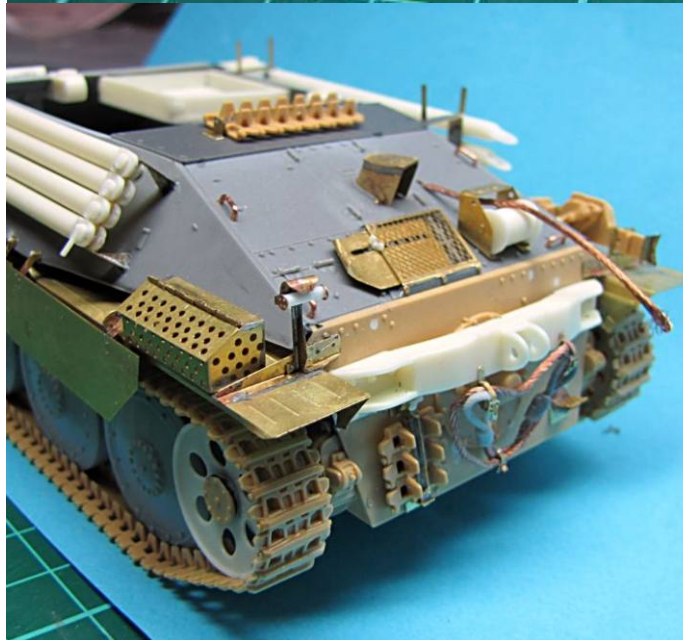
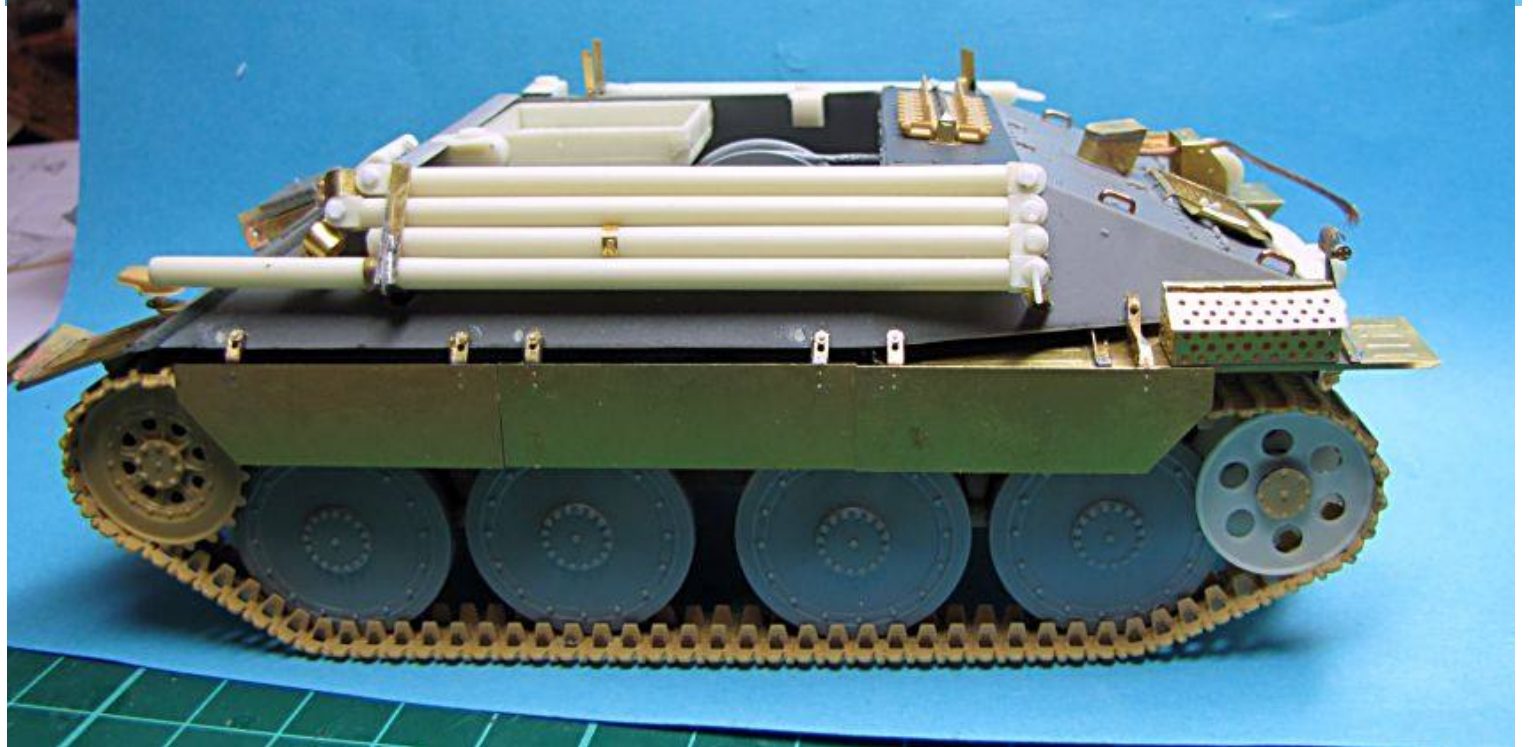
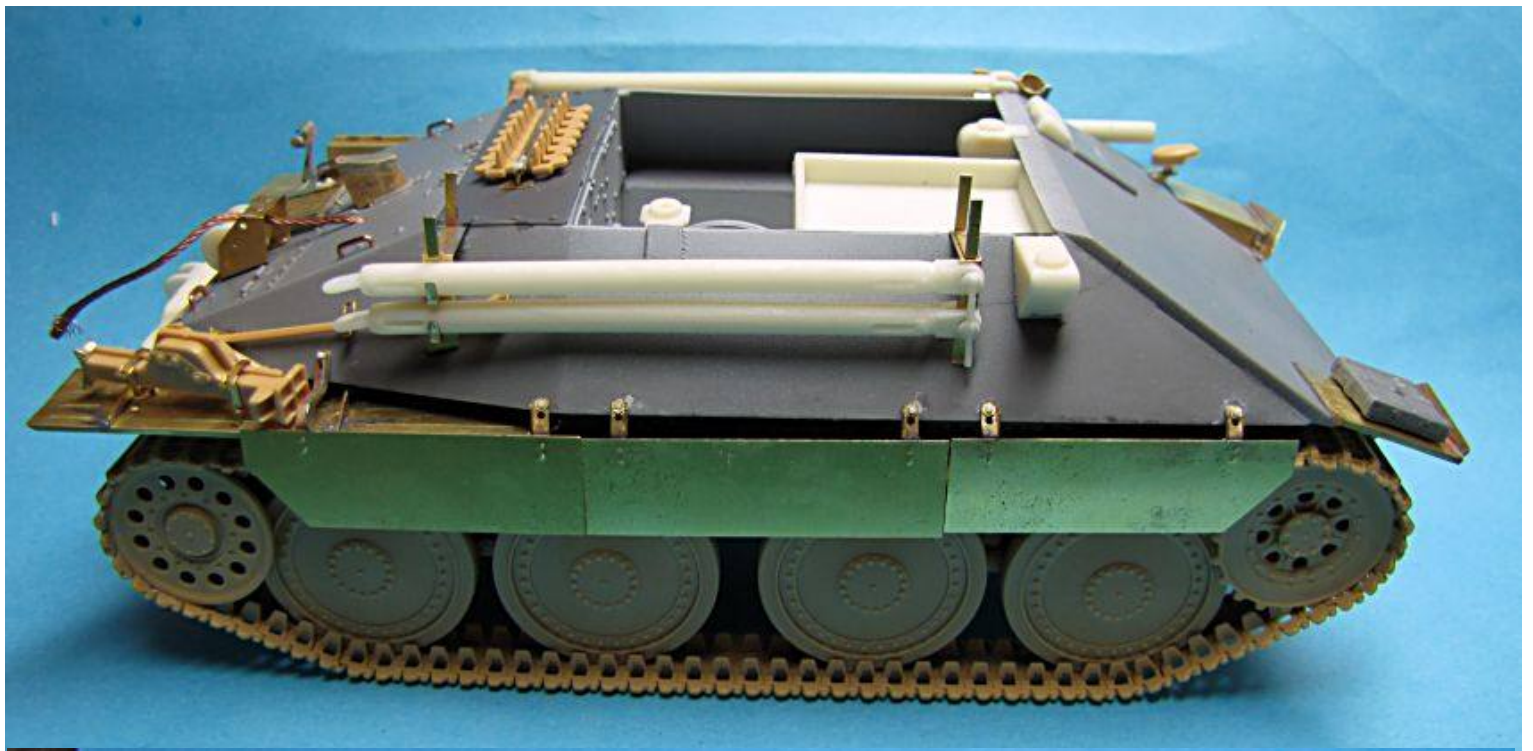
Because of lack of the references there is another common German pulley included in the kit together with this one, and the choice is yours

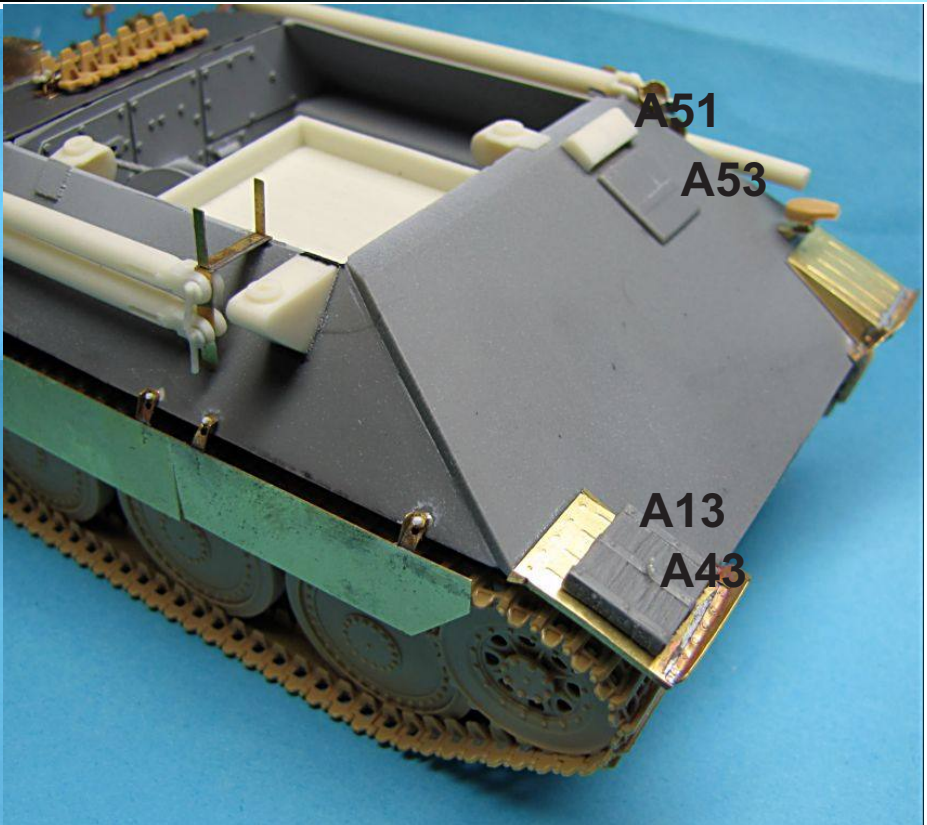
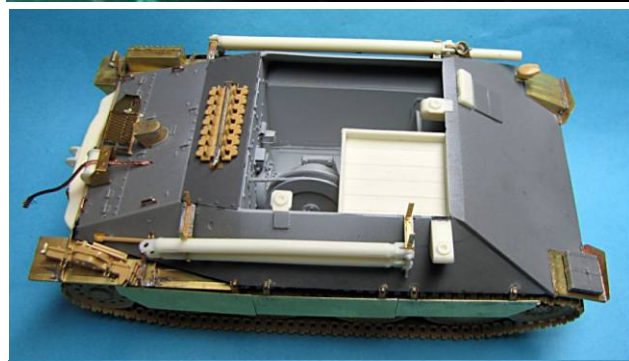
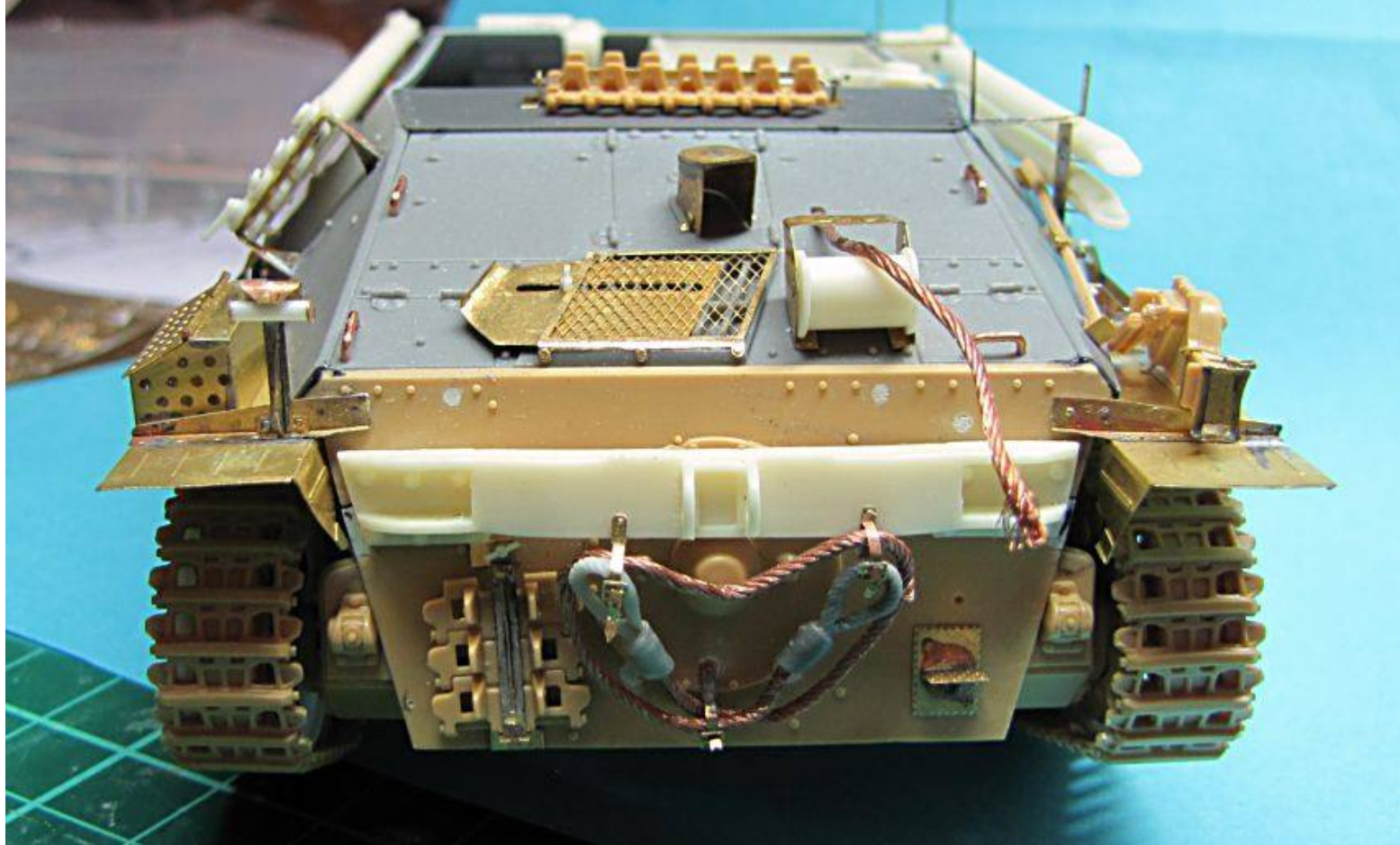


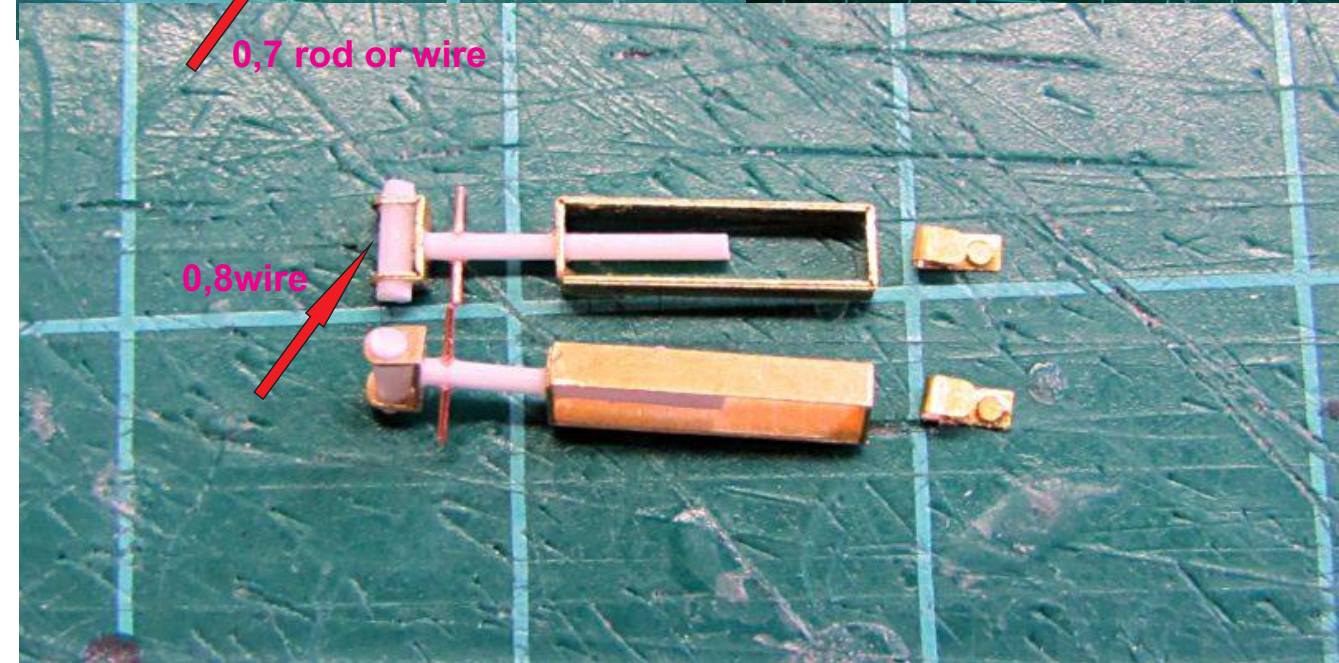
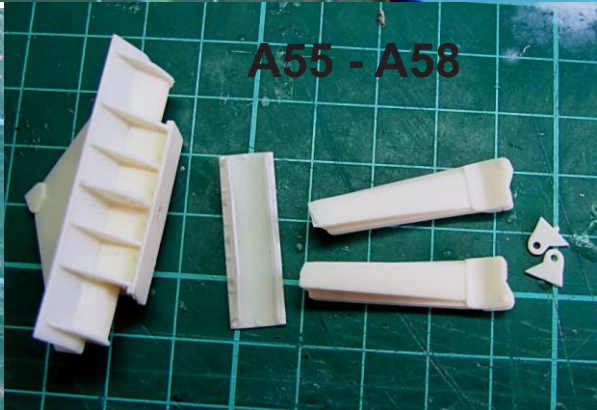
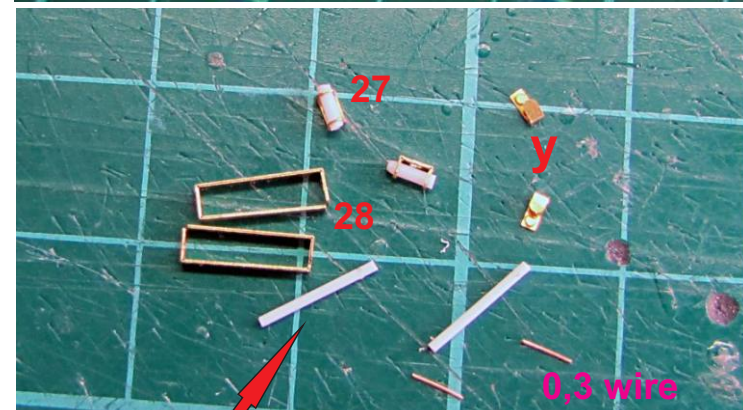
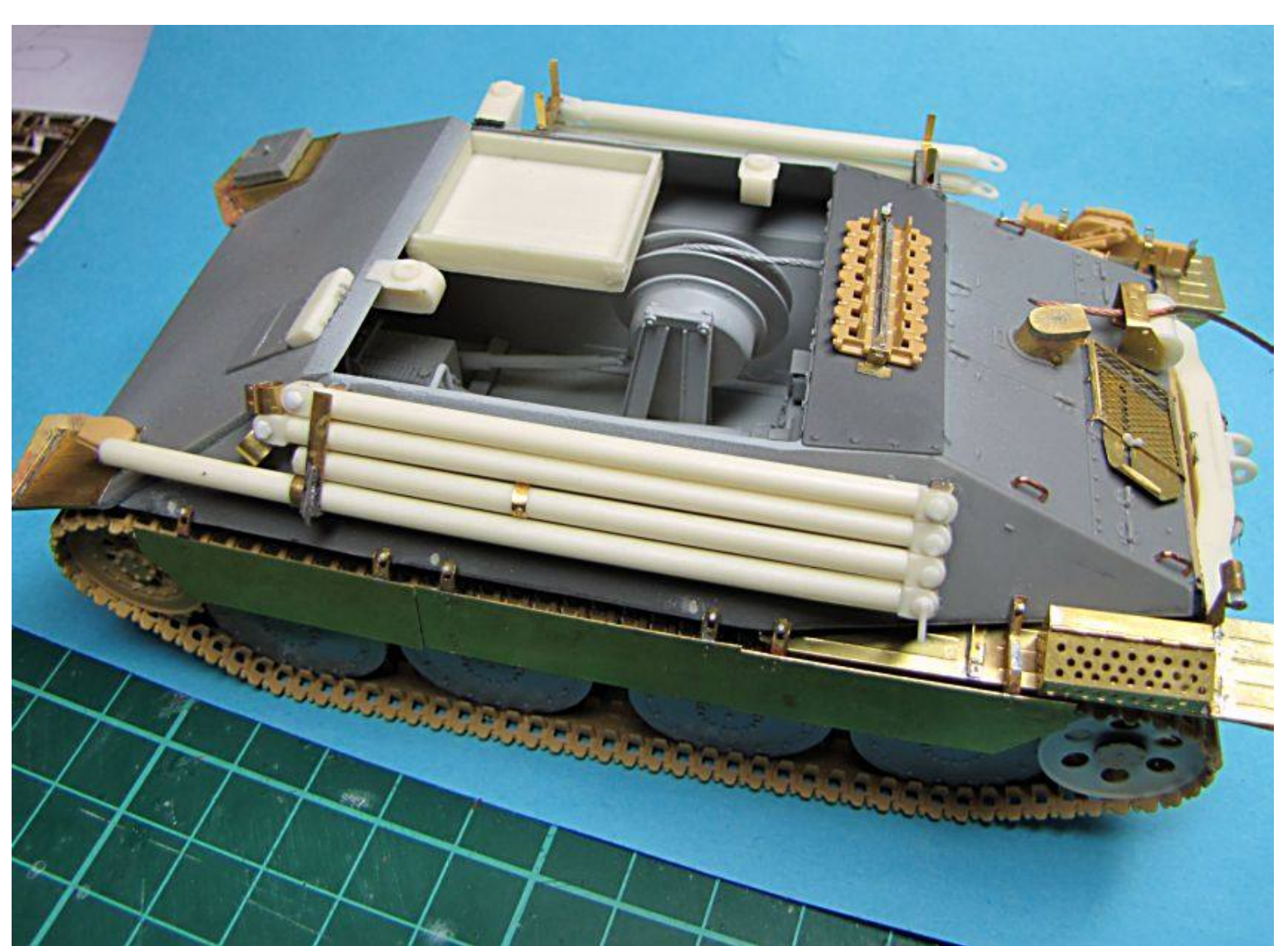


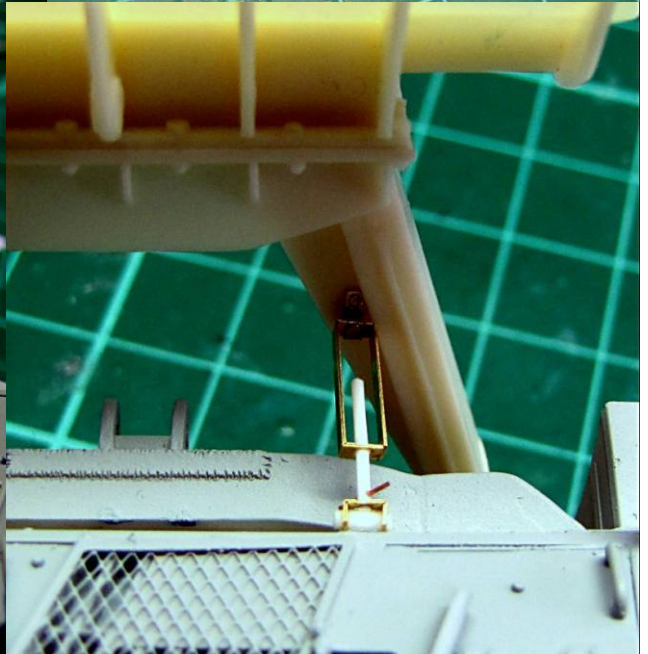
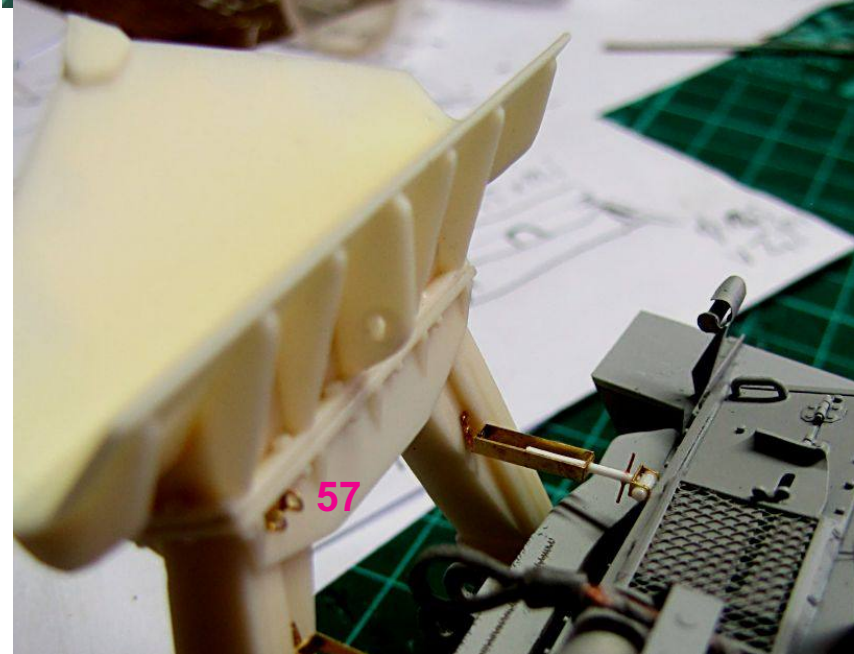
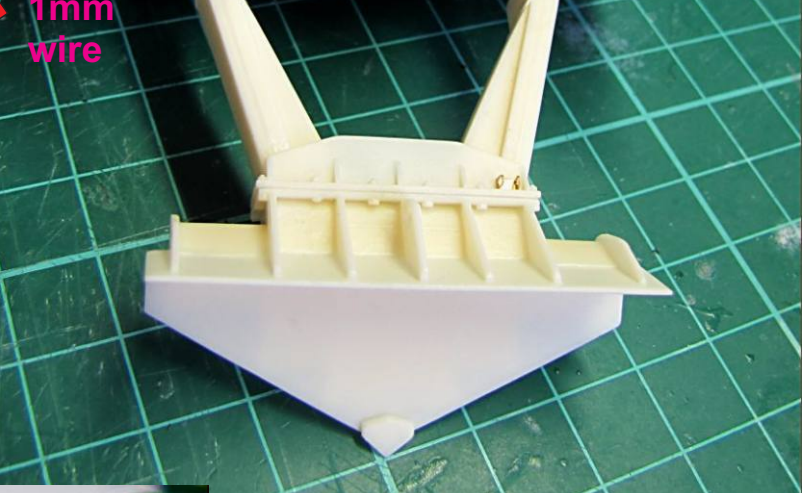
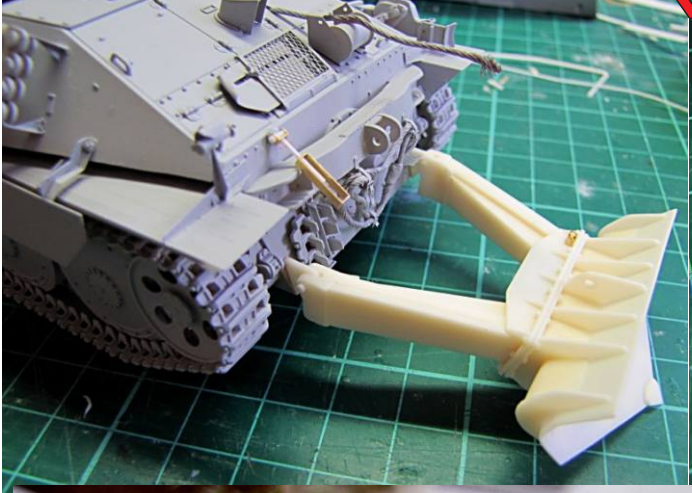
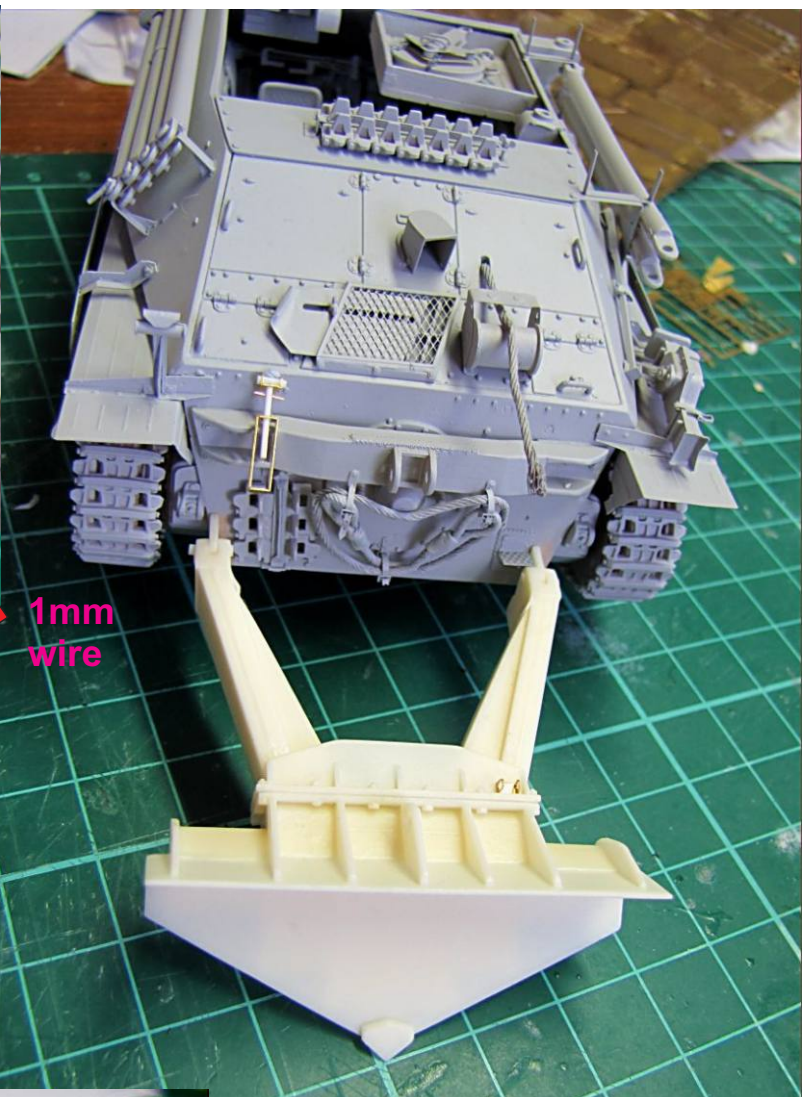
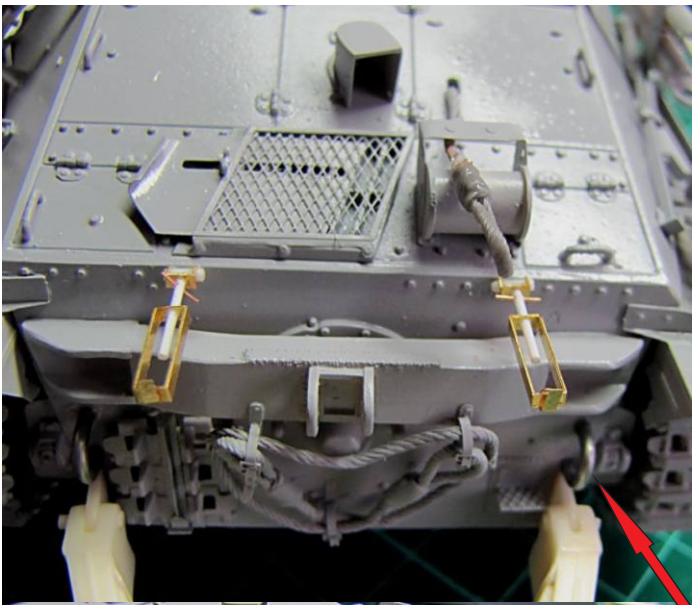


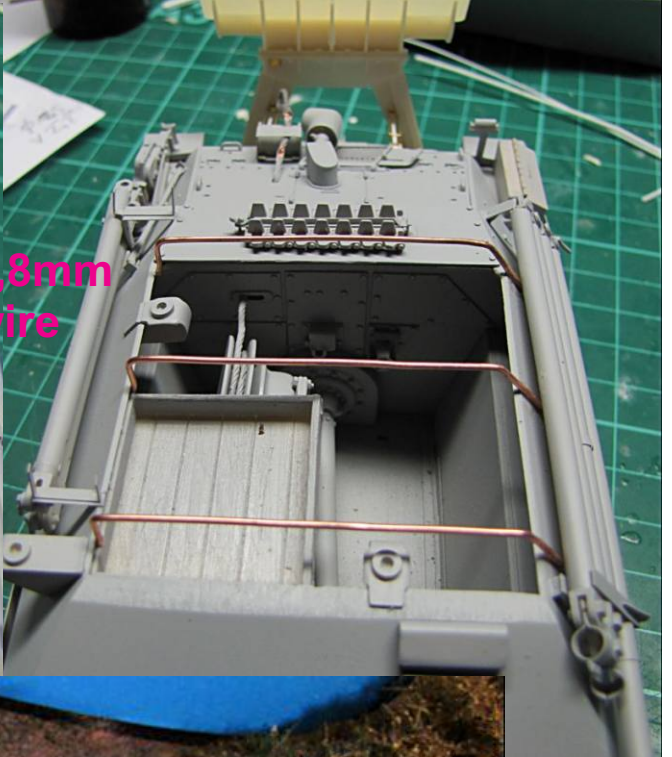
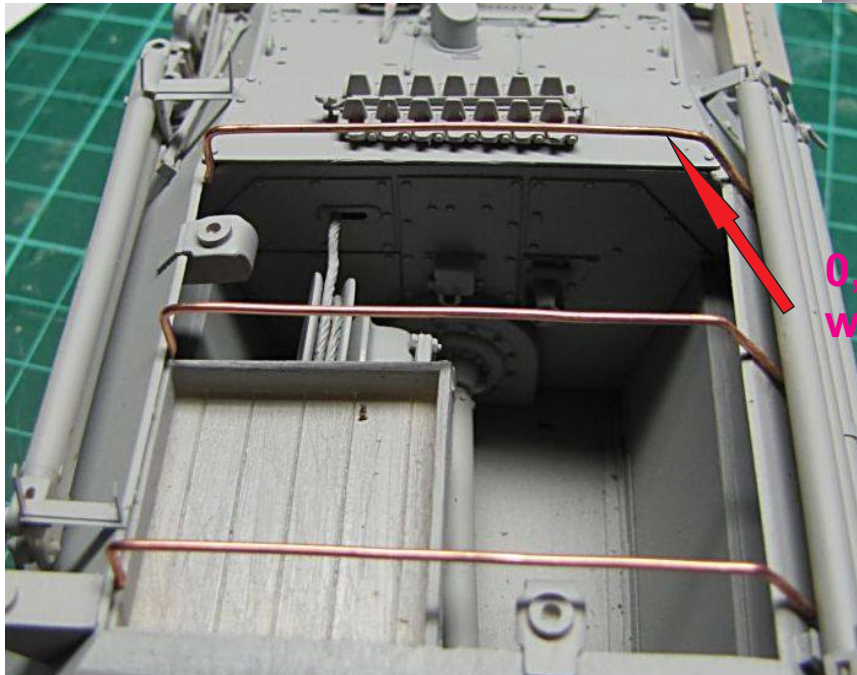
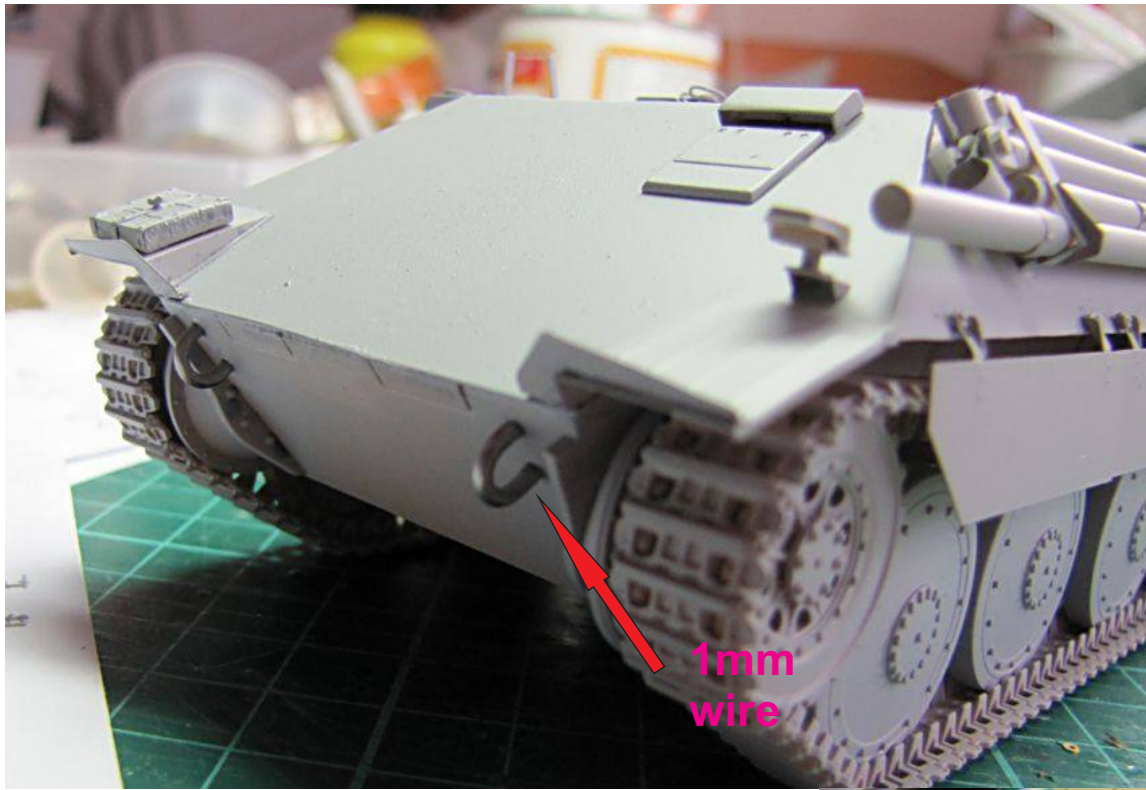


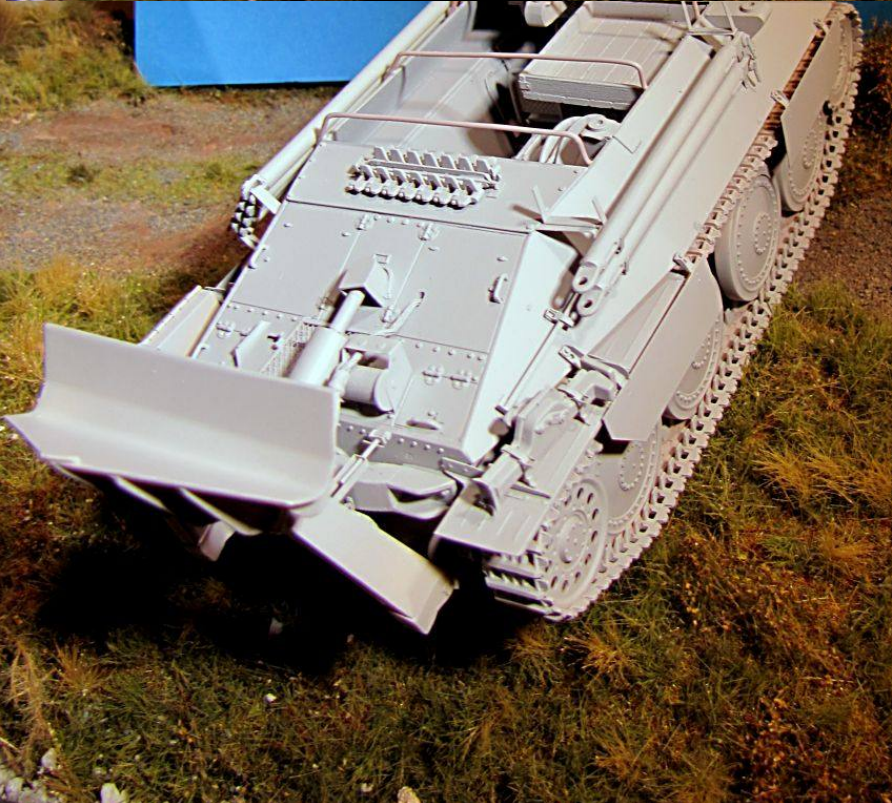
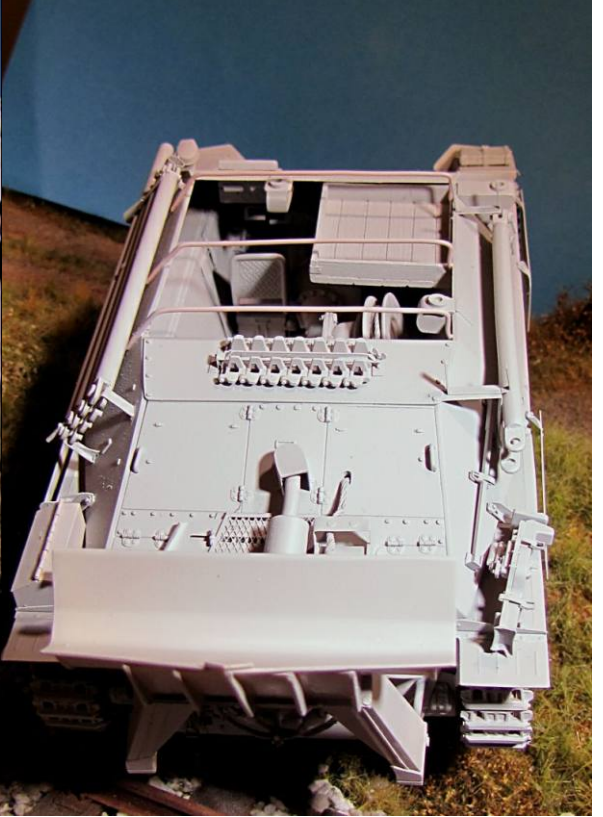














According to Osprey's New Vanguard 36 the late Bergepanzer was painted with thin coat of Rot - RAL 8012 (red primer) about half of which was overpainted with stripes and patches of well thinned Dunkelgelb - RAL 7820 (dark yellow) and Weiss RAL 6002 (white)  
Some patches of well thinned Olivgrün - RAL 6003 (dark olive green) were applied on lower areas.