

## **A "Middle of the Road" Approach to Using the AM-Works Panther PE Set**

Several times in previous write-ups for this group-build, I've mentioned that the AM-Works PE set can be used to detail out some of the DML kit's plastic parts and assemblies rather than using all of the PE parts and full brass assemblies.

Consider this a "middle of the road" approach between the either – or extremes of out of the box kit or using every single PE part in the up-date set. I confess that this is the way that I tackle most builds where I incorporate PE sets. I simply choose the most detailed combination of parts between the plastic kit and the PE set.

Sometimes (actually, quite often) there are no advantages to using the PE parts. The PE is either too thin, too simple, too complicated or when completely and correctly assembled and painted, the PE assemblies are indistinguishable from the kit parts. Another plus is the simplicity of just using the PE parts you need and forgoing the requirements to solder complicated PE brass assemblies, allowing CA or epoxy glue joints between the PE and plastic. Often, you'll also be able to make plastic-to-plastic glue joints between the detailed assemblies the kit, doing away with having to glue the brass assemblies to the plastic kit.

Our group-build Panthers and Jagdpanthers are no exceptions. There are several rather complicated and admittedly difficult PE assemblies in the up-date set that don't offer much advantage over the kit parts. The front fenders, cleaning rod tube, and rear stowage boxes are good examples of these kinds of choices.

Unless you're going to take advantage of the way that the PE parts can be shown "damaged" or the PE stowage containers can be shown open, the plastic kit parts, when detailed with some of the PE parts and finished, will give almost all of the final look of the PE assemblies with only a fraction of the effort required to build the PE assemblies to a high state of fit and finish.

Below are a couple of photos of one of the plastic kit's rear stowage boxes with the PE mounting frame and hooks. You can see that if the box is to be shown in an "as new" or factory-finished state, and the lid is closed, the plastic box detailed with the PE parts is nearly as nice looking as the PE box in the same state. The PE box's real advantage is that you can show it opened or with very realistic dents and other damage. But if you don't want this, why bother with the extra work if there's not improvement in the final appearance?

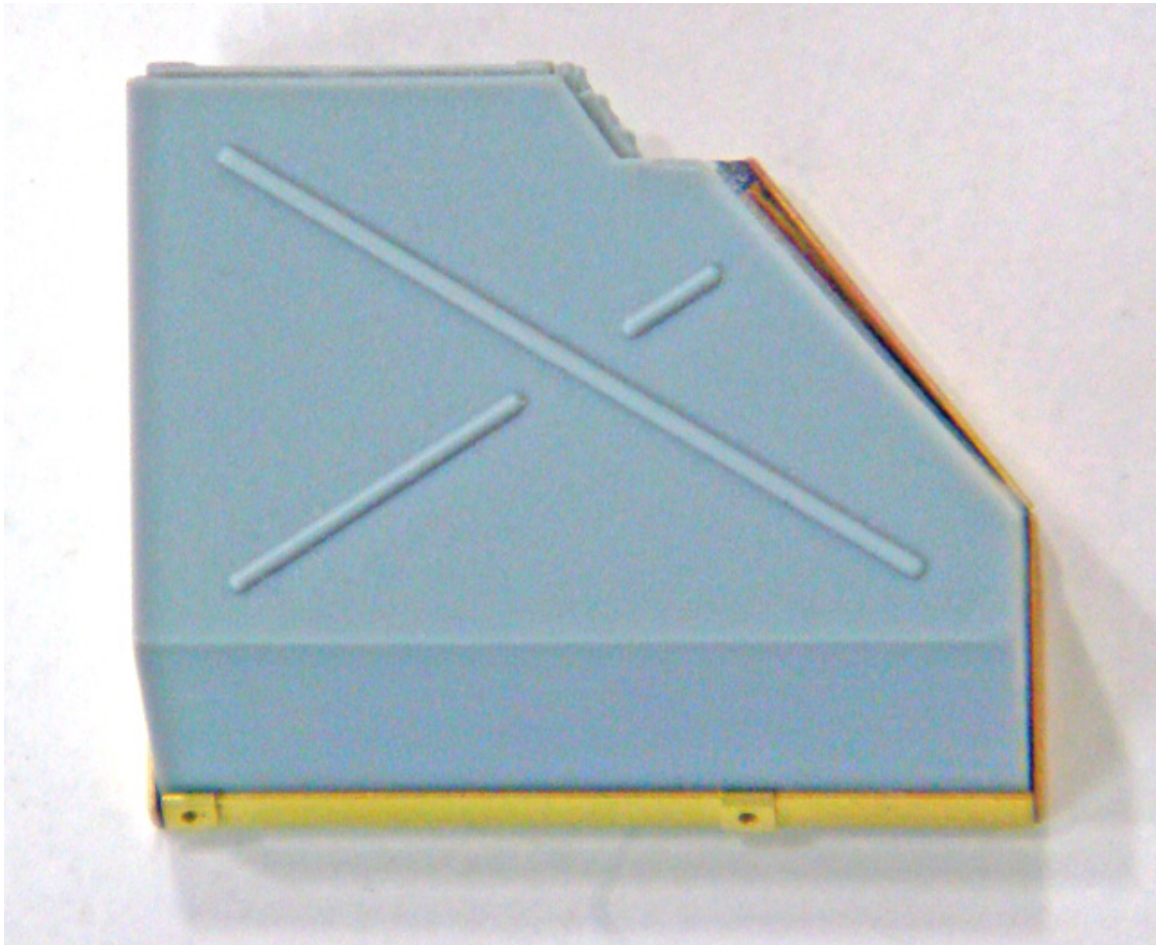
The same can be done with the kit's plastic cleaning rod tube. It can be detailed with the PE mounting brackets, end cap handles, and latches with keeper chains.

Other examples are the plastic kit's tool racks. These can be sanded thinner (from behind), the "C-hook" tubes can be drilled out, and the racks detailed with

the PE brackets, tool clamps and other bits resulting in nearly as nice a final look as the full-Monty PE tool racks. The example photo was put together with some spare PE parts and could certainly have more of the PE clamps, etc, added to it, but hopefully, you can get a visual idea of what I'm talking about.

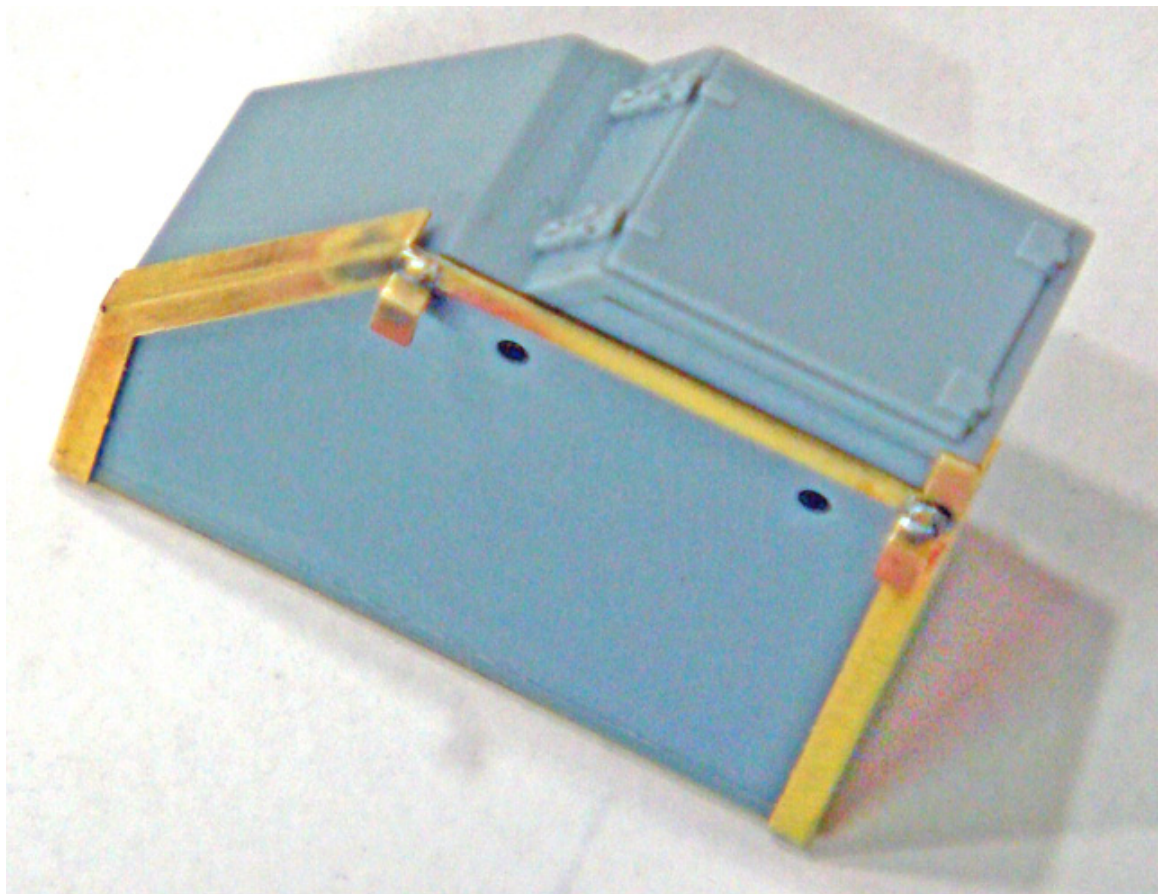
If you seek to follow this "middle of the road" approach, often the PE parts can offer some serendipitous advantages beyond their added fidelity to detail. An example of this can be seen on the rear photo of the tool rack. There you can see that by cutting the PE attachment point for the "C-hook" pins and keeper chains long, and then inserting that like a pin into a hole drilled in the plastic tool rack, a very strong glue joint can be achieved that is nearly invisible on the finished assembly.

I used the tip of a knife to scrape a shallow groove for the pin on the back of the tool rack. I then bent the pin over and glued it with CA from behind. Once the CA was set, I sanded the back of the rack smooth. The bent pin "locks" the PE part in place very strongly. A little forethought in how you're going to use the PE parts in combination with the plastic kit parts will often lead to such discoveries of ways to use the parts to your advantage.



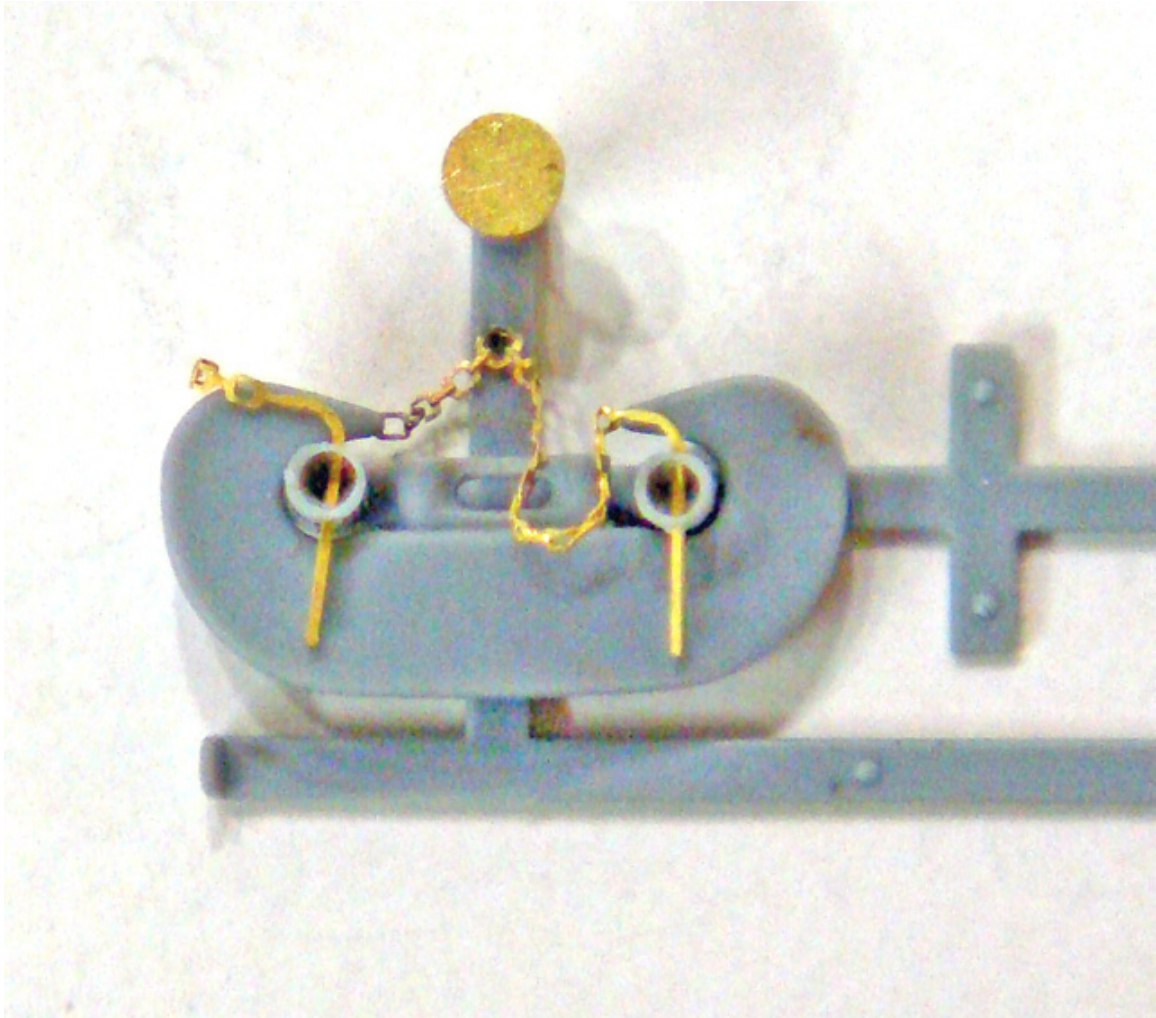
One of the kit's plastic rear stowage boxes with the AM-Works PE mounting bracket added to it. If you look closely, you'll notice that PE bracket fits nearly perfectly to the kit's box requiring only a small, thin filler piece added to the outside of the box.

When I removed the molded-on kit mounting bracket, I "squared" up the sides of the plastic box which had a slight taper from front to rear that allows the box to be drawn from the injection mold. Therefore, the DML box's dimensions on its front and rear are not the same and each represents a compromise by the mold maker to the necessities of the manufacturing method. This is a common type of dimensional "error" that has to be dealt with when combining after-market accessory sets and injection molded kits.



Another view, this time of the rear of the box. Note that I soldered on the two mounting hooks before I added the bracket to the box. These hooks are how the prototype boxes were attached to the actual tank, and this is where the PE parts will really enhance the detail of the plastic boxes.

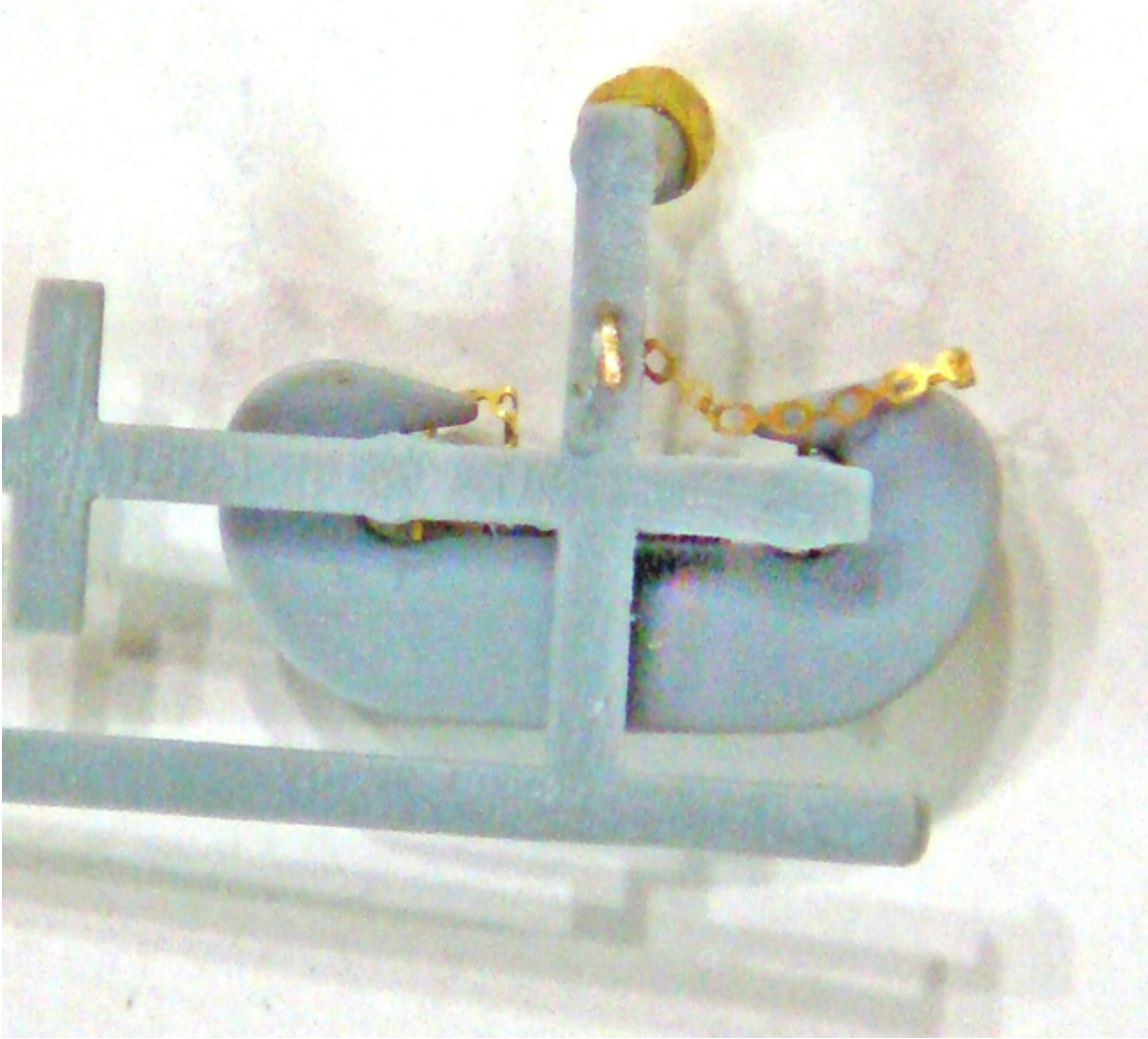




Here is the kit's plastic tool rack "A." Note that by just thinning the part a little from behind, cleaning up some of the "mold taper" around its edges and adding only two PE parts, a significant enhancement in its appearance is achieved with only a fraction of the effort required to build the complete PE tool rack.

My next step might have been to remove the molded on tool clamps from the shovel and wire cutters and replace them with PE tool camps. Once more level of detail beyond that could have been replacing the mounting strap on the shovel's head with a strip of lead foil or brass from an old PE fret and doing the same with the two mounting loops on the ends of the wire cutter handles.

Note that the small holes for the "C-hook" pins could have been drilled out using a new, no. 11 X-acto knife blade, twisting it in to one side of the mounting tube for about half its thickness and then doing the same from the other side. A set of micro-drill bits wasn't even necessary to add these PE bits. All well within the basic skill-level range of techniques.



Finally, note how the attachment point of the PE keeper chains and pins was used as an attaching pin for the same PE part to the plastic tool rack. Again, the tip of a new X-acto knife blade twisted from behind until its very tip came through the front of the plastic part would have made a small hole to glue the PE part into.