Just my thoughts and experience with the Unitza M5Tech kit (Replica).

This is in no way meant to bash Umnitza. Overall, my satisfaction was met and the customer support even after the sale for questions was also met with the exception of just one.

I painted and installed all components myself. Well, my son helped with the install. My experience in painting came a long time ago from school and then for a couple of years in the Military before I started flying for the AF. After that point, it became an enjoyable hobby of mine. I am in no way a professional in this field, but I do have extensive knowledge in the area of parts such as these being produced (injection process) and painting. In my current job I was once responsible (SQAE) for the supplier PO who delivers the bumpers, rocker panel and a few other hang on parts to our company.

Items: M5Tech front Bumper, Mtech rocker Panels, MTech rear bumper & Rear Diffuser.

Shipping: Shipping was via Greyhound Bus. I personally think this is a very good method; especially, if you are on the east coast and not in a hurry for your items. Otherwise, you might want to consider an alternate shipping method and obviously with higher cost involved.
The parts all arrived at the Greyhound station in which you will need a pickup truck or something for these large items to fit in. All were packaged extremely well with no apparent damage.

After unpacking, (this was really hard work!) you might need to make a special trip to the dump. Otherwise, you garbage collector will for sure love you…! All of this packaging is needed, but there is a lot of it. You will need to arm yourself with a cutting devise to help you along during this task. Just make sure you are very careful. You do not want to cut too deep and contact the part; it can be repaired, but surely to add time and cost.

All of the parts are produced from polypropylene with the exception of the small covers which they are of ABS material. Ideal condition is to have no surface coating on any of the parts. This way <u>you</u> or your paint guy knows exactly the condition of the surface and how it will need to be prepped.

After Unpacking: The front and rear bumpers had a surface coating applied to them (primer..?). This more than likely applied by the manufacturer in China before shipping them to Umnitza. Now, why? Why, would they do this? This cost money right? So, I am under the impression that this surface material was used to hide something, especially when it must be removed. Otherwise if it's not, I can guarantee that you will eventually have a peeling problem. Perhaps the problem could start after a rock chip develops, and you can forget about a future repair as this area would never properly feather to apply the new coating. Now there is a fix for this. Remove it! I used regular paint thinner and about two hours of my time to wash this coating off, down to the base PP material for each bumper. My guess would be there were only 1-2 thin coats or just enough to achieve hiding.

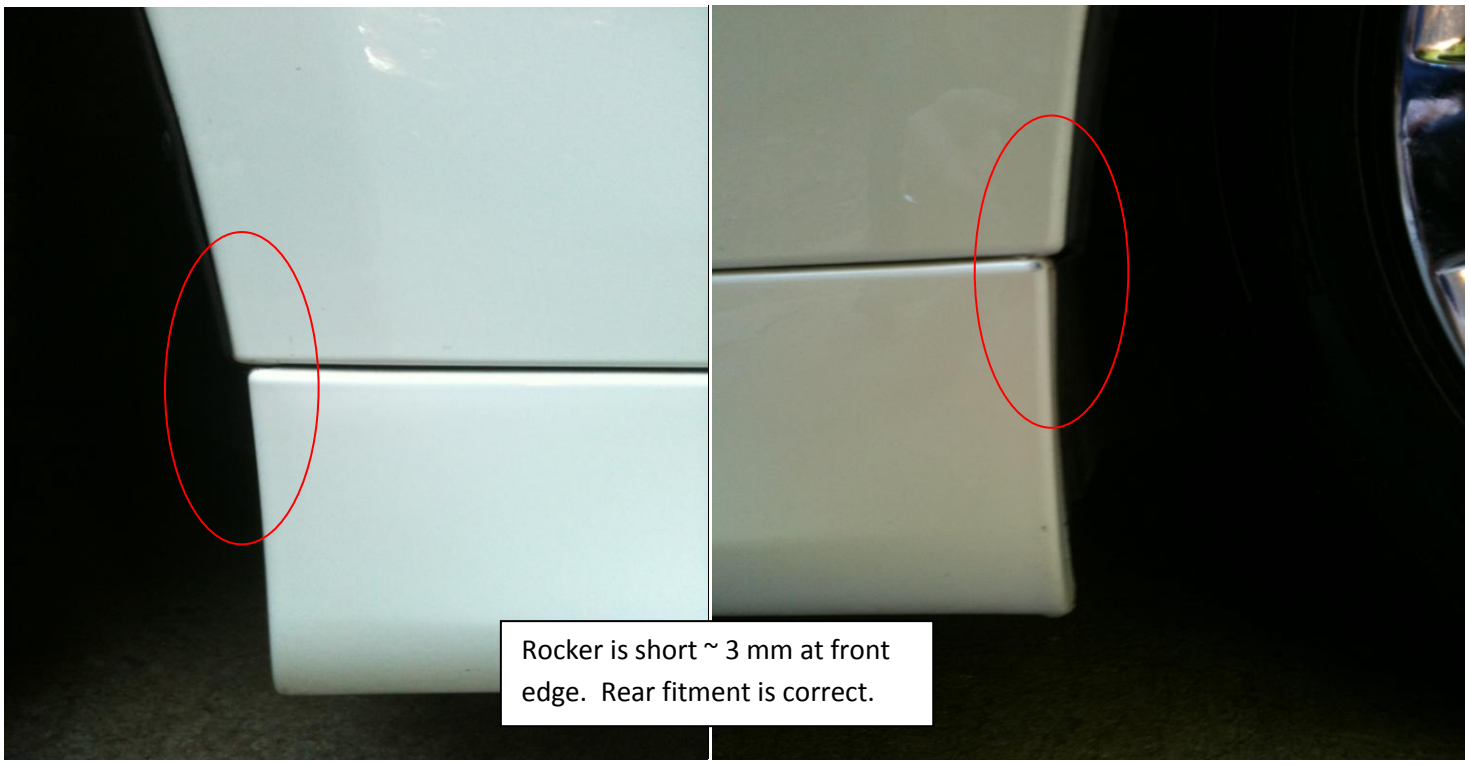
> **Rocker Covers** – No surface coating, only PP. (Black)
> **Rear Bumper** – Gray primer. Wasn't sure what was up with this and it concerned me regarding adhesion since I had no idea what this material was and how it was applied. (Gray)
> **Front Bumper** – Flat black surface coating. Initially, I thought there was no coating until the part was ready for paint – SURPRISE!!!
> **Diffuser** – No surface coating, only PP. (Black)
> **Covers** – No surface coating, only ABS. (Black)

Surface condition of the parts was actually better than I expected it would be. That is the parts that had no coating applied. They were smooth and only needed to have a final sanding or a finishing scotch-brite used on them. When painting PP material you can paint directly over it; however, you will need to use an adhesion promoter. There are several out there, Bulldog is one of them. Primer is not the way to go unless you are using one that is designed for this material and has some flexibility in it. You can use a primer on small areas, perhaps for a repair etc… From the supplier of BMW they use a flaming process to acquire the adhesion properties needed. This is done by a robotic program that basically uses a fan type flame to heat the surface, making it very hot. This sort of etches the surface allowing for the coating to properly adhere. The OEM

parts will have a primer applied to the surface and will it not be required to be removed as it has been correctly applied, you should only need a light sanding and then paint unless there are other defects that need attention.

Rocker Covers: I would strongly recommend that you buy a handful of the upper clips. These are the green ones and most likely you will break a few of them during R&R of the panel. The panels were sanded using a scotch-brite and then cleaned with a pre-cleaner. Two coats of adhesions promoter, three coats of base color and three medium coats of high solid clear.

Removal and Installation: The removal of the panel was quite simple. You will just need to remove the wheel liner edge screws and rivets and all of the push pins underneath the panel. There are three small black rivets on each side on the forward radial wheel edge. You will need a small punch to push the center pin into the wheel well and retrieve it when it falls out. If you try to pull the rivet out without doing this, you will damage the rivet and possibly the liner or car surface. Installation was a bit tricky on the first one but much easier on the other one. It's recommended that you attach the clips to the panel and not try to attach the panel to the mounted clips, it can be done but I am sure it's a PITA. I recommend two people and if you have a third person to be in the car to help align the front horizontal pin this will make it a little easier as these are all blind connections. Both parts sit a little short on the front edge. I would say ~3 mm. It's nothing that stands out and grabs you, but you can see it once you are aware of it. The rear was maybe 1 mm and is really not even noticeable. This condition could be slightly different from part to part as I am sure there are some variations in the suppliers process that could be better controlled.



Rear Bumper: I recommend that you purchase the three brackets left, right and center for the Mtech through BMW. This will provide the support you will need at the lower wings and rear diffuser. Or, you can use zip ties to secure. I chose the brackets. The rear bumper as previously mentioned had a gray primer or similar material. I was very curious about this and actually had initially considered to remove it, for just "*in case*" purposes. There were several scratches that needed attention prior to painting. Small surface imperfections and scratches are normal and should be expected when a part such as this is shipped. I lightly sanded the area and then I applied a small amount of primer with a touch up brush to fill in the scratch with the intent of block sanding them down the following day. While I was applying the primer and as they say watching paint dry… I had a much closer look at the surface and then became quite uncomfortable with whatever this material was. I noticed several areas where it was flaking off of the surface, especially around the areas where it's normally hard to sand. Then I took my finger nail and lightly scratched over the main surface of the bumper and the material came completely off! Next, I took the lower and upper areas slightly bending them and this caused the gray primer material to crack. This confirmed my thoughts of having to remove it totally. I applied a little paint thinner to a rag and wiped it on the surface and the gray material started to come off easier than expected. Almost as if spray can primer or a very cheap primer was used. If you use automotive primer it can also be removed but it takes quite a bit of effort and after it cures, it's even more difficult to remove. You will see the areas in the pictures where the automotive primer is still on the bumper after it had been wiped with thinner. The unknown gray material comes off leaving the automotive primer behind. The rear bumper was eventually sanded using a scotch-brite and then cleaned with a pre-cleaner. Two coats of adhesions promoter, three coats of base color and three medium coats of high solid clear.

Removal and Installation: I used the tutorial that I located on this forum. I don't recall the person's name but he did an excellent job in detailing this task (Black car from the UK). I only want to add one thing to this process and it was recommended to be by one of our reworkers. *REMOVE YOUR TAILLIGHS!* There are four small nuts and it takes three minutes. I forgot to do this and I realized during the install why. Most likely if you don't remove them you will scratch or damage the corner of the bumper just below lights. I originally thought it was due to making it easier and not causing damage.

http://www.youtube.com/watch?v=-QNe-ZxGT_E

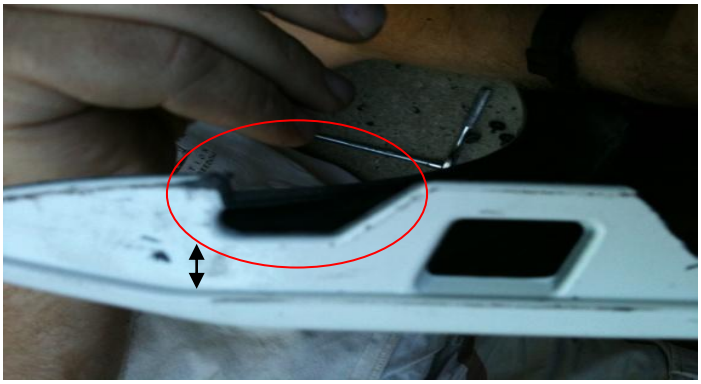
Front Bumper: Again, I was not aware until minutes before painting that there was a flat black primer type material on this part as well. Basically, after scuff sanding and cleaning the bumper it was ready for paint. I applied the pre-cleaner to a paper towel and started wiping the part down. Immediately, there was a problem on the surface. When the pre-cleaner came in contact with the surface it had such a reaction that this primer material started lifting off, just as if you were using a paint

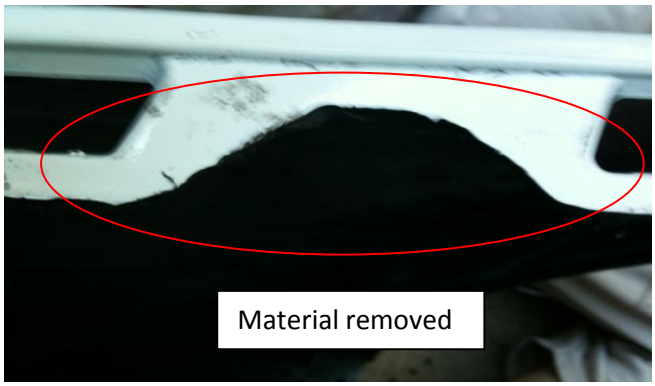
remover! At this time, I realized there was some kind of a coating on this bumper as well. Again, why? Why would they spend money to do this? At this time I got out my trusty can of thinner and began the washing process just like I did on the rear bumper. It was not too difficult to get off, just messy and a PITA and about two hours of wasted time! The bumper was also sanded using a scotch-brite and then cleaned with a pre-cleaner. Two coats of adhesions promoter, three coats of base color and three medium coats of high solid clear.

Dribble and run spots from where the cleaner came in contact with the bumper surface.

Bumper during the thinner washing process

Removal and Installation: I followed the TIS and another tutorial I came across on this site which help me out a lot. There are fit adjustments needed. This normal and required even with a factory bumper. Adjustment, I mean, with the mounting screws and bolts, shifting the bumper here and there and securing the bolts. There was one ***BIG*** problem and eventually we figured it out. On the sides where the bumper and upper fender meet, there is a bracket mounted that clips into the top edge wing of the bumper as it wraps around the fender. We struggled for quite a while trying to figure out why this would not connect and lock. Eventually, we compared the two bumper areas and we clearly observed where the material next to the clip slots on the Umnitza bumper was much wider than the stock bumper. This condition was causing a collision in this area and prevented the clips from engaging. Now, you would think that there would be some information about this from Umnitza, as I am sure I am not the first to have this problem. It's clearly nothing that would be intermittent in the same bumper styles as it is directly in the tooling. The only reason that it wouldn't be the same is if multiple tool sources and suppliers are being used. I used a dremmel tool to cut several mm's away which then provided the clearance the bracket needed to properly engage the bumper wing. Next, I installed the bracket and the wing easily snapped into the correct position. I know providing *detailed* instructions from Umnitza would not be a good idea, but general ones where possible fitment or modification could be required would have been nice to have. The second fit issue was the Styrofoam crash pad under the grill was too long. I was able to flex a little here and will have to go back and review later to see if any of this material needs to be trimmed down.





Diffuser and Covers: These parts were uneventful and were simply scuff sanded using a scotch-brite and then cleaned with a pre-cleaner. Two coats of adhesions promoter, three coats of base color and three medium coats of high solid clear. I decided after painting the diffuser white that I would wrap the diffuser with 3M Di-Noc Carbon Fiber, I like it!

Installation Covers: The covers simply snap in and fit nicely. Don't forget to attach the tow cover lanyard to the main bumper.

Installation Diffuser: This was a PITA… You clearly need two people and lots of patients. I recommend using some foam or blankets to put on the ground; otherwise you could scratch the bumper surface as you wrestle with this task! A lot of flexing and bending but once it all comes together it fits nicely.

Conclusion: As stated earlier, I am very pleased with the M5Mtech kit from Umnitza. You will need to consider the total cost of both OEM and the replica kits and then decide for yourself if the reduced costs for the replica parts are worth it to you and if you can live with the small issues. In my case, I can.

I've been really struggling to figure out why the bumpers came with this additional coating (gray and black). This really bugged the crap out of me... After reviewing the bumpers on the stand when painting was competed the light finally came on. The primer is used for a hiding tool marks. I could clearly see the injection flow lines on the surface and they were very visible. I

was considering repairing these which would have required me to wet sand with a block, possibly adding something to the surface in the affected areas and then block sanding it out. I decided to wait and have a look when everything was mounted on the car. In my case, the car is white so this obviously helps hide things as opposed to a darker car which tends to show more. My decision was to leave it alone because I think I am the only one who can see this. If I were to point out these flow lines, the average person would probably still not even notice them in car position.

I contacted Umnitza regarding the primer material on the bumpers but they couldn't explain it and wasn't aware of it. I was asked to send the info to his boss, I did, but I've never received a reply. No big deal for me as I was able to remove this material anyway. I was just curious as to why it was there and perhaps notify the customers of this. The reason I make mention of this issue is because when someone purchases this kit, in most cases they will take it to a body shop for painting. If you trust this shop I would say that they would probably inform you or just go ahead and deal with it. In some cases, a shop may miss this or not want to deal with it and continue to paint over this material, only for you to have a problem in the future. With all of this said it would be wise for one to discuss the parts when taken to a shop for painting and specifically ask them to check the surface coating for adhesion and any weak primer material. Again, there is absolutely no reason I can think of for the supplier in China to pre-primed these parts other than to hide something. Even if the primer used was a good automotive one, you would still have no idea how the surface was prepped and if it was prepped correctly. If bad preparation was performed then most likely you will have future adhesion problems. So in my opinion, they are better left unprimed so they can be dealt with properly.

Umnitza should put together an over view of the installation process for their products. Not in great detail, but just general areas as mentioned. E.G. Primer on bumpers, Modification required of front bumper to lock into wing brackets, Rear bumper L, R and C mounting brackets. When I called to ask about installing the diffuser I was told by the person that they only sell bumpers they don't install them. That was the one question I was not happy with if you have any questions feel free to email me at Tonyb635@aol.com