COMMON PROSTHETIC APPLICATION PROBLEMS

...and how to respond to them.

STUART BRAY

Let me be clear about something. Prosthetics are huge pain in the backside.

- **They are easy to stick it on badly.**
- **It's easy to get bad edges.**
- **They are easily painted too heavily.**
- **It is difficult to make them look like skin.**
- **It's easy to have them looking mask like.**

Putting them on you can find things about yourself that you didn't realise you disliked quite so much.

I know because I've experienced it myself (*a lot*) and it still happens on occasion because the bottom line is:

A piece of rubber isn't human skin.

If we go from the basis that the prosthetic *doesn't* have a vested interest in your success, and that if it *can* find a way to screw you up then *it will*, then we can start approaching it with the respectful and wary confidence it deserves.

Obviously the best prevention occurs during manufacture, and if one is in control of this then the fault lies with your own errors.

However, applying pieces that others have made means the fruit of cut corners, false economies and sloppy work may be a legacy you inherit through no fault of your own.

The dust that such omissions kick up may not be your fault but they may be your issues to resolve.

Yet perhaps it is precisely because of all this that I love the process so much.

My first attempts at prosthetics were basically a series of enthusiastic bursts of excitement, smashed against disappointment. Trying to overcome it was compelling.

Problems, problems, problems

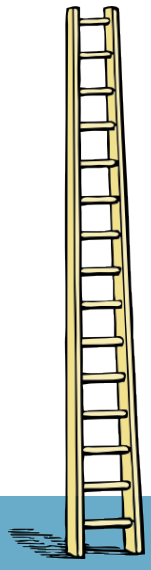
Of all the things that can go wrong with a prosthetic I've managed, for the purpose of convenience, to categorise them into nine main areas of concern.

1. **Bad Edges**
2. **Wrong colour**
3. **Not sticking**
4. **Piece not soft enough**
5. **Piece too soft**
6. **Piece too heavy**
7. **Delamination**
8. **Hair**
9. **Holes in the head**

My intention here is to address them one at a time and discuss **why** they happen and **what** you can do in response.

Notice I didn't say how you can make them perfect every time without fail. I didn't say that because if I did it would be an utter lie. This is make up, not magic. Although it is sort of magic for me.

If something goes wrong then there is a **reason** that it went wrong. Usually the first thing that happens is your emotions will kick in and they will rush to the scene in order to pour themselves liberally over the problem in a thick veil of opaque chaos intended to prevent you from finding a solution.



My intention is to take you through those emotions and get to the root cause and identify the problems and explain to you how I would address them.

Think of it as a ladder dropped into a pit you can grab a hold of to help yourself climb out.

Artistry & Process

There is much **artistry** involved in make up as you know, but there is also a good deal of **process** and I find often it is the lack of *correct* process, material failure, and most often *user error* which permit such faults to occur.

So then do we turn to such mundane methods to pick the thread back to it's source.

It means you can use this process regardless of how you feel. If one can do so then the emotional labour of coping with the situation is much relieved and you free up some brain space in order to apply your artistry, which we all know feels very nice.

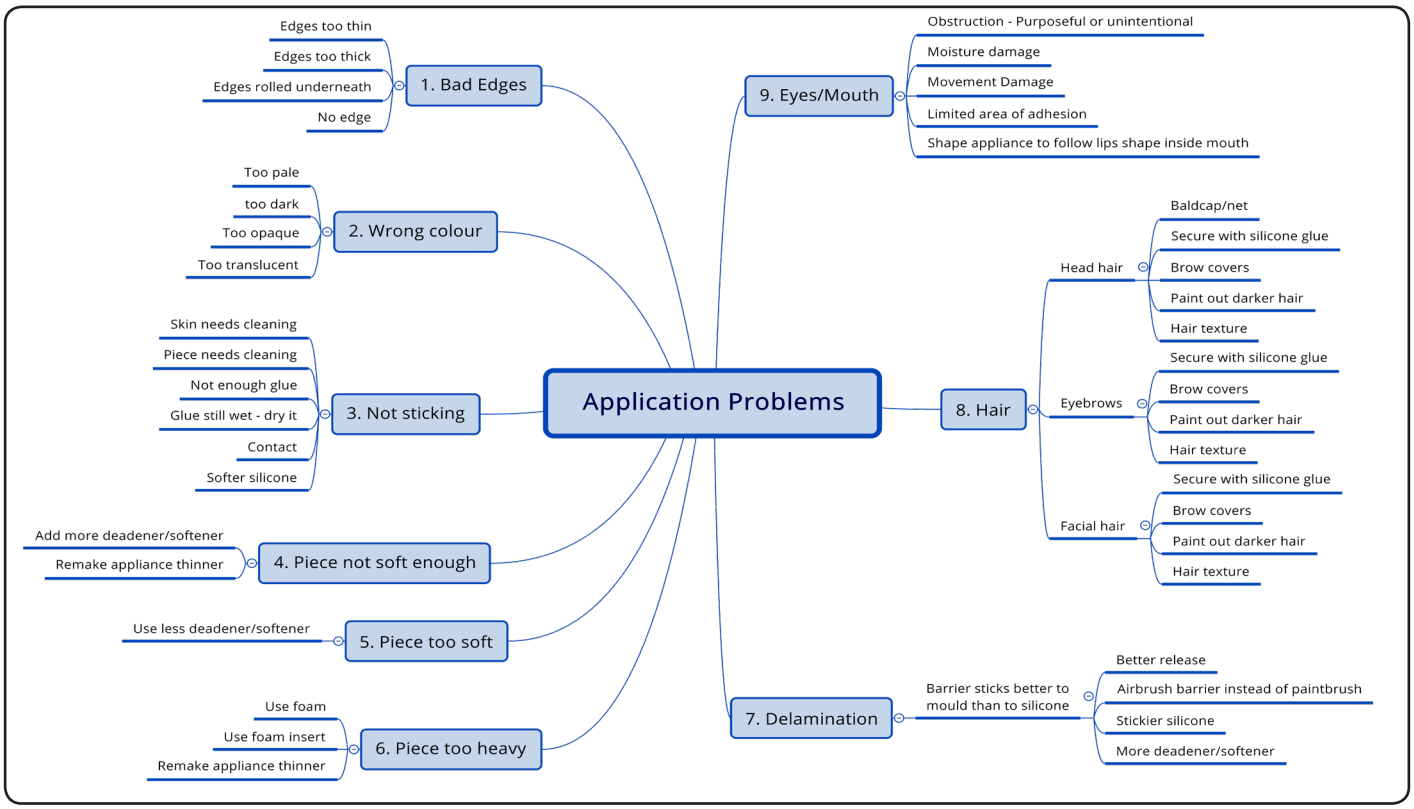
To me it's this combination of process and art that creates something special and of which you can feel responsible and proud.

It is this experience which keeps me coming back to bits of rubber. As you'll see, I love the process, I love discussing the process and I love being around people that care for the process.

I look forward to seeing how this can work for you and what you can do with it.

-Stuart

Common Application Problems Checklist



1. Bad Edges

- Edges too thin.
- Edges too thick.
- Edges rolled underneath.
- No edge.

2. Wrong colour

- Too pale.
- Too dark.
- Too opaque.
- Too translucent.

3. Not sticking

- Skin needs cleaning.
- Piece needs cleaning.
- Not enough glue.
- Skin excreting substance which inhibits adhesion.
- Glue still wet - dry it.
- Contact.
- Softer silicone.

4. Piece not soft enough

- Add more deadener/softener
- Remake a thinner appliance

5. Piece too soft

- Use less deadener/softener.

6. Piece too heavy

- Use foam.
- Use foam insert.
- Remake appliance thinner.

7. Delamination

- Barrier sticks better to
- mould than to silicone.
- Better release.
- Airbrush barrier instead of paintbrush
- Stickier silicone.
- More deadener/softener.

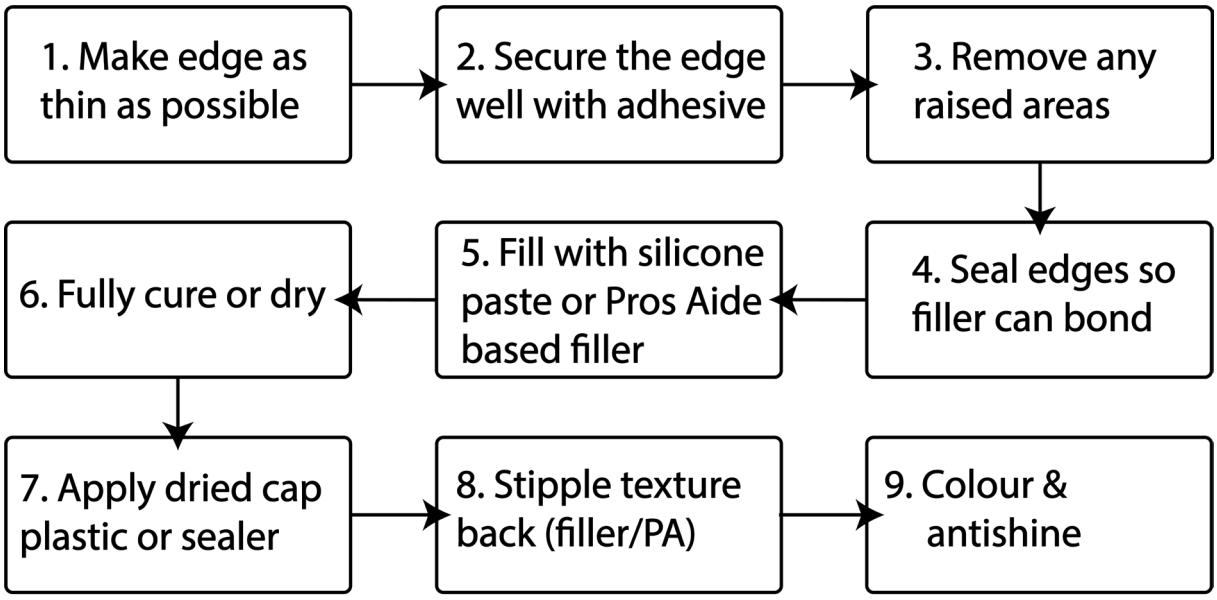
8. Hair

- Head hair.
- Baldcap/net.
- Secure with silicone glue.
- Brow covers.
- Paint out darker hair.
- Hair texture.
- Eyebrows.
- Secure with silicone glue.
- Brow covers.
- Paint out darker hair.
- Hair texture.
- Facial hair.
- Secure with silicone glue.
- Brow covers.
- Paint out darker hair.
- Hair texture.

9. Holes in the head: Eyes/Mouth/Nose/Ears

- Obstruction - Purposeful or unintentional.
- Moisture damage.
- Movement damage.
- Limited area of adhesion.
- Shape appliance to follow lips shape inside mouth.

Fixing Bad Edges



1 - Make the edge as thin as possible

If the edge is too thick, the first step is to make it as thin as possible before applying. If you can snip away anything from the back of the piece with small scissors, that will help reduce the amount of filling and repair needed once applied.

If the edge has folded, use 99% alcohol to unstick the adhesive. This will work on most adhesives, both acrylic emulsion and silicone based. It unsticks only temporarily; it does not actually remove the adhesive, but gives you time to reposition the edge.

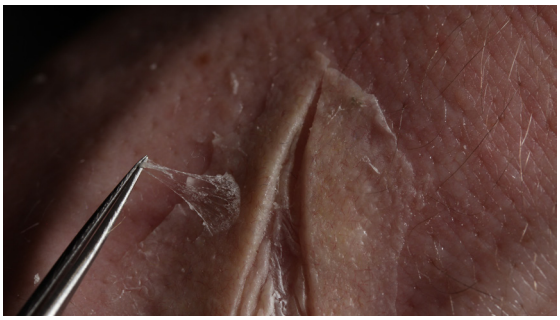
Allow the alcohol to evaporate and you will hopefully have a better placement. It may not be flawless, but it's likely going to be better than it was.

2. Secure the edge well with adhesive.

This works best with a silicone glue on silicone appliances but if you only have Pros Aide or similar, then use that.

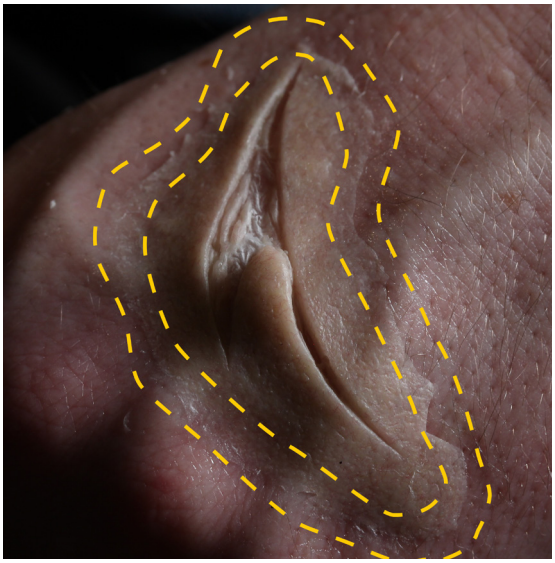
The most important thing is to make sure that anything you intend to repair is secured and stuck properly to the skin underneath. If any of the edges move or flap around, then you can't repair them successfully.

3. Remove any raised areas



During this unrolling and securing process, you may accumulate ‘bogies/boogers’ - tiny pieces of silicone and cap plastic which subsequently remain attached to the glue.

Carefully remove these with a small cotton swab or tweezers. If you have cap plastic lifting, dissolve the edge of it with a little acetone or nail polish remover if you prefer.



Anything which is raised higher than the appliance itself will make filling more difficult, so ensure you are only left with steps or holes to fill, not lumps or folds on which could get in the way of filling.

4. Seal edges so filler can bond.

Because we have an appliance made of silicone, there are several different surfaces on show now – cap plastic which remained attached to the piece, bare silicone because some cap plastic was removed in the unfolding of edges, patches of sticky adhesive and clean, bare skin.

All these different surfaces may bond differently to any fillers we could use, so it’s a good idea to apply sealer which will unify the surface and help it behave more as a single surface.

There are a number of good makeup sealers such as Green or Blue Marble, Sealer A from Matthew Mungle WM Creations, Fixer Spray from Kryolan and Ben Nye Final Seal. No Tack Pros-Aide is also an option.

5. Fill edges

OK, so now we just have bad edges, but at least they’re secure, stabilised and sealed. This is now a much easier surface to repair, and so let’s take a look at a couple of ways to tackle that.

Smaller ‘bad edges’ can maybe be filled using a layer or two of water-based adhesive such as Pros Aide Cream or Beta Bond, which is what I liked to use here.

As the glue starts to thicken and dry, you can fill small steps and create texture which helps hide the edge.

Tease out the edges of the glue whilst wet so it doesn't dry with a defined, thick edge; blending any filling material from the trouble area where it is needed gradually into the skin is the key.

This is an example of the kind of edge you do NOT want to create with the glue. Blending out gradually is better – a few thinner coats is better than one thick coat.

If the edge is too thick to be filled with this technique, then we can crank it up a notch and use a thickened Pros Aide filler such as Pro Bondo by Maekup (Dave Stoneman), Prosthetic Transfer Material (PTM) by Christien Tinsley, Mel Gel from Mel products or you can thicken some Pros-Aide yourself with some Cab-O-Sil (Be careful handling Cab-O-Sil).

Use a small, flat bladed tool such as a palette knife as that gives you a smoother finish and more control and is easily wiped clean with solvents if it becomes too gummy.

As all these fillers are water based, they need to properly dry between layers so building up in a few thinner layers is more successful that trying to smooth a deep deficit with a single, thicker layer which will take much longer to dry. It also allows you to taper the filling effect which helps blend into the skin but creeping out further a little into the skin with each layer.

When dry, a stipple of Beta Bond or Pros Aide is great as a final texture, and once this is dry, it should provide a decent repair which sticks well to the piece and skin and remains flexible.
We recommend not filling more than about 1mm with this technique.

For thicker edges, we've gotta bring out the big guns! **We need a silicone paste.**

If you have some of the silicone used to make the appliance left over, you could take some of that and add a thickener. However, it may be more convenient to simply use a pre-made silicone based paste such as Skin Imitator or Sculpt Gel.

A small amount mixed well and smoothed over the surface can fill deep areas quickly, and being a silicone it cures rather than dries, so it doesn't rely on evaporation to set up.

A warm hair-dryer will kick this off in about 5 to ten minutes, so keep an eye on it, and check that you can stipple a little texture into the setting surface with a small piece of sponge so it doesn't remain too smooth and shiny.

You can always use an anti-shine after it has set, but a neat little trick if you want to get super-ninja with this is to apply a sheet of prepared, dried cap plastic. Small patches can be used like this to provide a cap plastic surface, kind of like a retro fitted appliance.

Before the silicone is totally set, it remains sticky enough to hold a stretched out piece of cap plastic much the way silicone gel sticks to cap plastic in a mould when making an encapsulated piece.

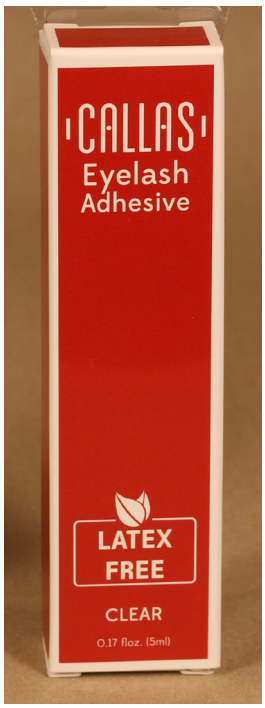
Press this down with a coarse sponge, stretch out any edges to remove wrinkles and allow the silicone paste to fully set. Once it has set, dissolve and blend edges with a little acetone or use a nail polish remover if you prefer.

6. Let all this fully dry.

It's important that any drying and curing required happens before doing anything else. Impatiently slapping colour and powder on materials which are still wet will just tip you out of a frying pan and into a fire. You can speed up the process with a warm (not hot) blow drier.

7. Check the Texture

If you notice the surfaces have different textures because of the filler being smooth etc., a few thin coats of stippled texture using adhesives and or Duo Surgical Adhesive may help.



Mixing the Duo with Pros-Aide or Beta Bond will help, or try a little Pros-Aide Cream which is thicker than regular Pros-Aide but thin enough to easily taper off into the skin.

8. A Final seal

A second dose of sealer maybe necessary to again bring all these filled areas, skin and cap plastic into line and unify the surface. Applying makeup will be easier if the surface is more similar. Spray, stipple or use a brush to apply a couple more thin layers over your finished surface.

9. Colour and anti-shine

Use your preferred brand of makeup. For this I've used alcohol palettes, but crème based make-ups thinned with 99% IPA (only if your cap plastic is not alcohol soluble), surgical spirit, a makeup solvent such as 244 fluid or Kryolans Makeup Blend is a great way of turning a crème into a liquid so you can apply thin washes and build up a translucent finish.

Anti-shines are great, as many times with appliances there is a shine but it's not sticky, so powder wouldn't stay.

Anti-shines such as Kryoan Perfect Matte and Makeup Internations Super Matte Anti shine are always in the kit. Also MAC's Matte Crème Matifiante gel, Silicone Arts' Silicone Finishing Powder and Lunatic Cosmetic Labs' Mystifying Mattifying microfinish pressed powder.