Dry Rot

The Mystery of Doors

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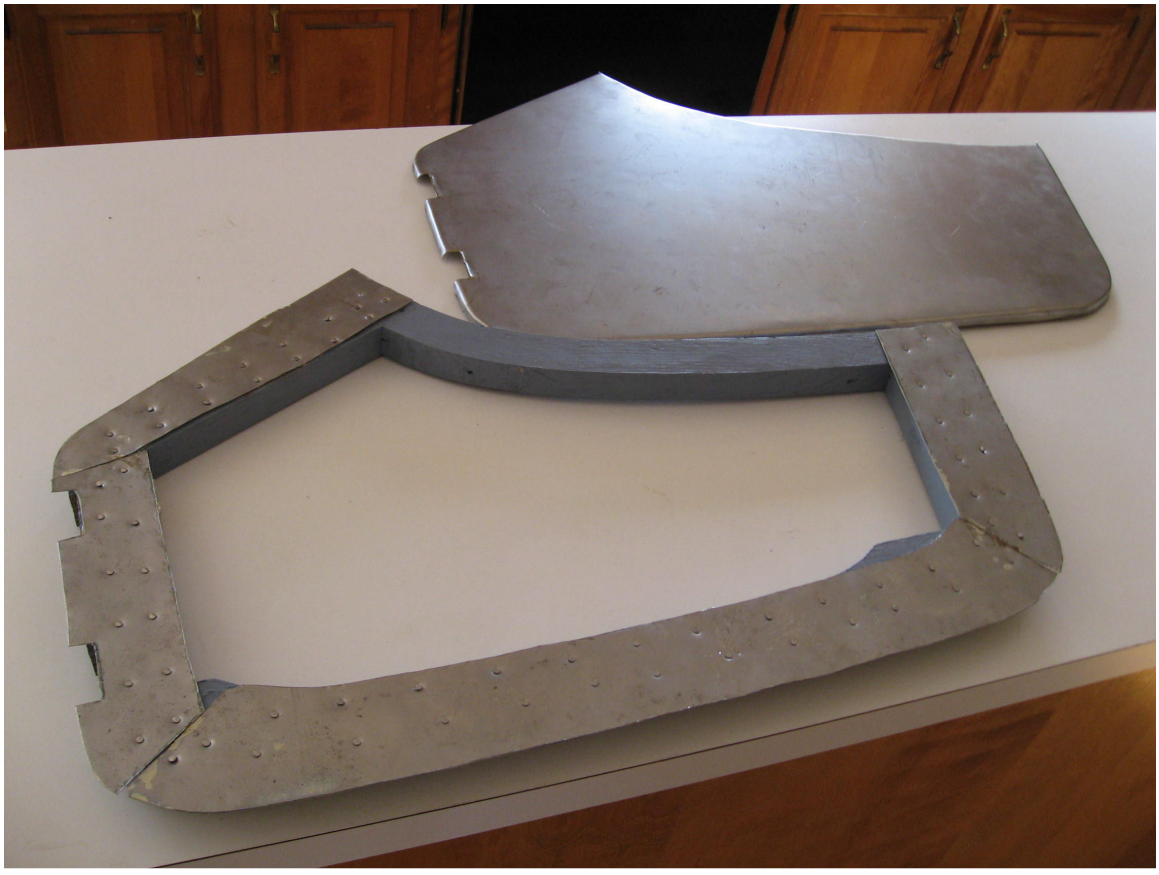
I would bet that you don't think too much about the doors of your Morgan; you slide the latch, swing open and jump in, well maybe not as easily as you once did but the operation pretty much follows that scenario. Perhaps you have to lift your door a bit to get it to shut or maybe twist it some at the top or go through a like gyration. This should not be, but more about that another time.

What really might get your attention unless you just choose to ignore it as you have done for years, is that row of unsightly bubbles that has formed about an inch up from the bottom that follow along the lower edge. When you had the car repainted some time ago the body shop said they "fixed" this, and they did too, for about a year or so. But like magic the bubbles started to appear again breaking through that nice paint job. When you complained they pointed to the sign that says, "rust repair not guaranteed". And so it goes, you just got used to it and the imperfections didn't really get too much worse over time, just part of the patina of a Morgan you think, like the cracks at the top of the front wings around the base of the wing lights.

Well it isn't so and doesn't have to be that way if you understand just how those doors are made and assembled. As you know, the basis for your door is the timber frame that is built from four pieces of ash taken from the wood shop and cut to fit your particular style of body tub. There were several types of tubs made over the years for the various models and the doors may have differed slightly for some of them. In any case the timbers for the roadsters followed a similar design, curved in two directions upper and lower pieces with straight hinge post and latch post all tightly joined together with several wood screws at each corner. The joints were precisely made and joined and sorry to disappoint, no glue is used to hold the assembly together.

In looking at your doors, you are baffled by how the skins are held on to the timbers; it is not readily clear how this is achieved. There are no nails or

screws or brackets apparent holding all this together. In reality it is quite simple, when the craftsmen fit the doors frames to a given tub they install the inner flanges that ultimately will hold the outer skin in place. These flanges, actually four pieces of sheet steel made of something close to 20-gauge metal, are securely nailed to the timbers to precisely overlap the door opening. A skin is fashioned to fit over the flanges and is offered up with its edge turned over and hammered flat securing it in place. The top front and top rear corners are shaped nicely and then soldered securely. There will likely be some additional filing and sanding to flatten any imperfections left from this hand forming and the notches are cut for the hinges. So there you have it, a Morgan door, so simple that a child could have thought it up. By the way many hand formed opening panels for small production English sports cars were made this way. For instance A.C. Ace and Ford Cobra bonnets were made like this, but instead of wood, the frame was fashioned from alloy or steel tubing with the flanges riveted in place.



Unfortunately when they made your doors, Morgan didn't bother to paint much in the way of those flanges or the backside of that skin either. Nor

did they caulk the turned over edge, so after five, or ten, or twenty years of being exposed to inclement weather, the damp crept in, either from above or between the turned over flange below and the skin. As time went on the unpainted metal began to corrode between and finally perforated from inside out with the rust bubbles you now see. In truth new doors may be made somewhat more impervious to this condition now, but as most of our Morgans are old, this is liable to be what we see.

So as mentioned your Morgan goes for a new paint job and some refurbishment and comes back all shiny and new, but after a short time the bubbles are back and you are beside yourself with grief. The doors looked so good, why did this happen? Well because the shop or you or whomever did the "fix" simply ground out the rust as best they could and skimmed it nicely with a smooth coat of filler, sanded and painted. This happened because the bubbles are only the tip of the iceberg and rust never sleeps. So in actuality this is what you really are trying to correct with a bit of filler, good luck…….

The photo above is the backside of the door skin and only the lower flange that it crimps to that was removed from the timber doorframe. On this particular door the other flanges were still in good shape as they sometimes are and were reused after being wire brushed and given a good coat of rust preventative paint. Note the lower edge of the door with a very thick coating of rust that has eaten its way through to the outside and the lower flange, in the same state, now removed from the timber frame as it is too far gone to use again. What is interesting to see is that much maligned timber doorframe is usually in fine condition. Perhaps a split here or there, easily glued or a broken hinge screw, again easily removed, but all can be considered useable for another fifty or so years. Funny to see how the timber frame has outlasted the sheet metal without any special treatment other than a bit of paint splashed on as an afterthought.

These photos, taken on Katie's island in the kitchen without her knowledge or approval, and the explanation illustrate the mystery of how the doors are made and attached and their shortcomings and why you cannot simply slather filler over the outer skin to repair rust and forget about it. The corrosion will come back rather quickly and there is nothing that can be done to prevent it. The only absolute repair is to make a nice new skin, remove the old skin, repair the flanges as needed, and caulk and paint the new material and install. Come to think of it this is about the only way to repair any sheet metal on a Morgan; remove, make new, treat, and replace. There are several ways to make new skins, an interesting process in itself same as making any other new panels, and all require a bit of fiddling and adjusting to fit your car again along with repainting. However this will solve the problem for good or at least your lifetime and probably well beyond.

If you haven't noticed, herein lies the beauty of a Morgan or most coach built prewar designed British automobiles of simple construction. If you have the skill level, even if your vehicle is a pile of rusty sheet metal, you can still use the old bits as a pattern to make new shiny bits from when required. In this era of planned obsolescence and recycling, what could be better?