



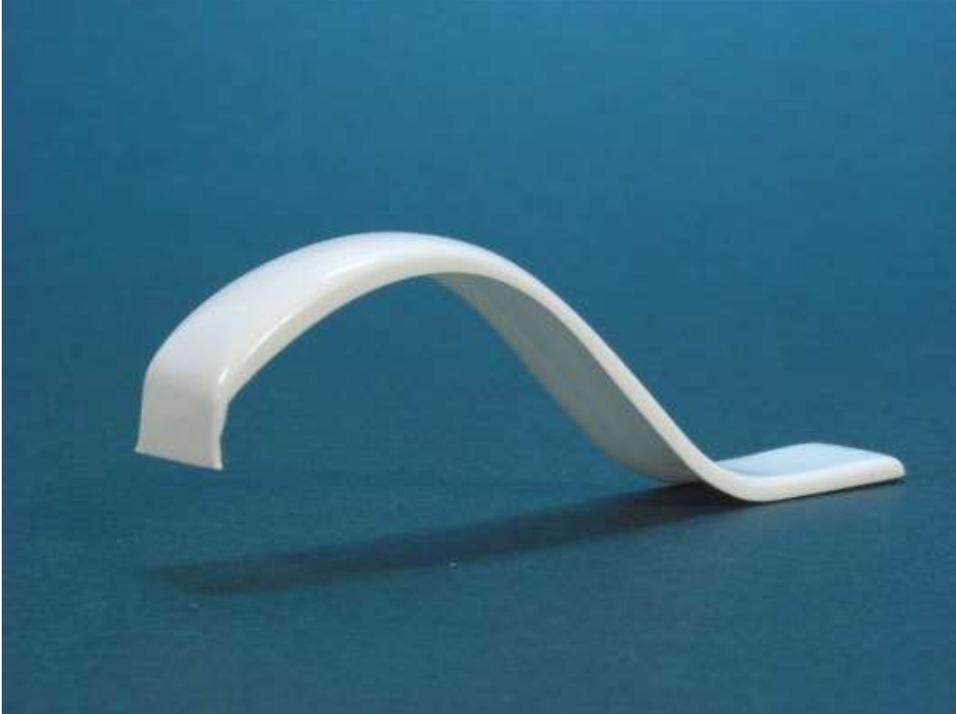
4. Watch, watch and watch some more, while the plastic is heating **DO NOT** wander off or answer the phone, just watch the plastic heating. At first it will draw tight in the frame then slowly it will "relax" and then start to sag, unfortunately this is where practise is the only teacher, but for the 150x150mm (6x6") frames you can expect at least 30-40mm (1-1.5") of sag. This happens slowly so don't panic

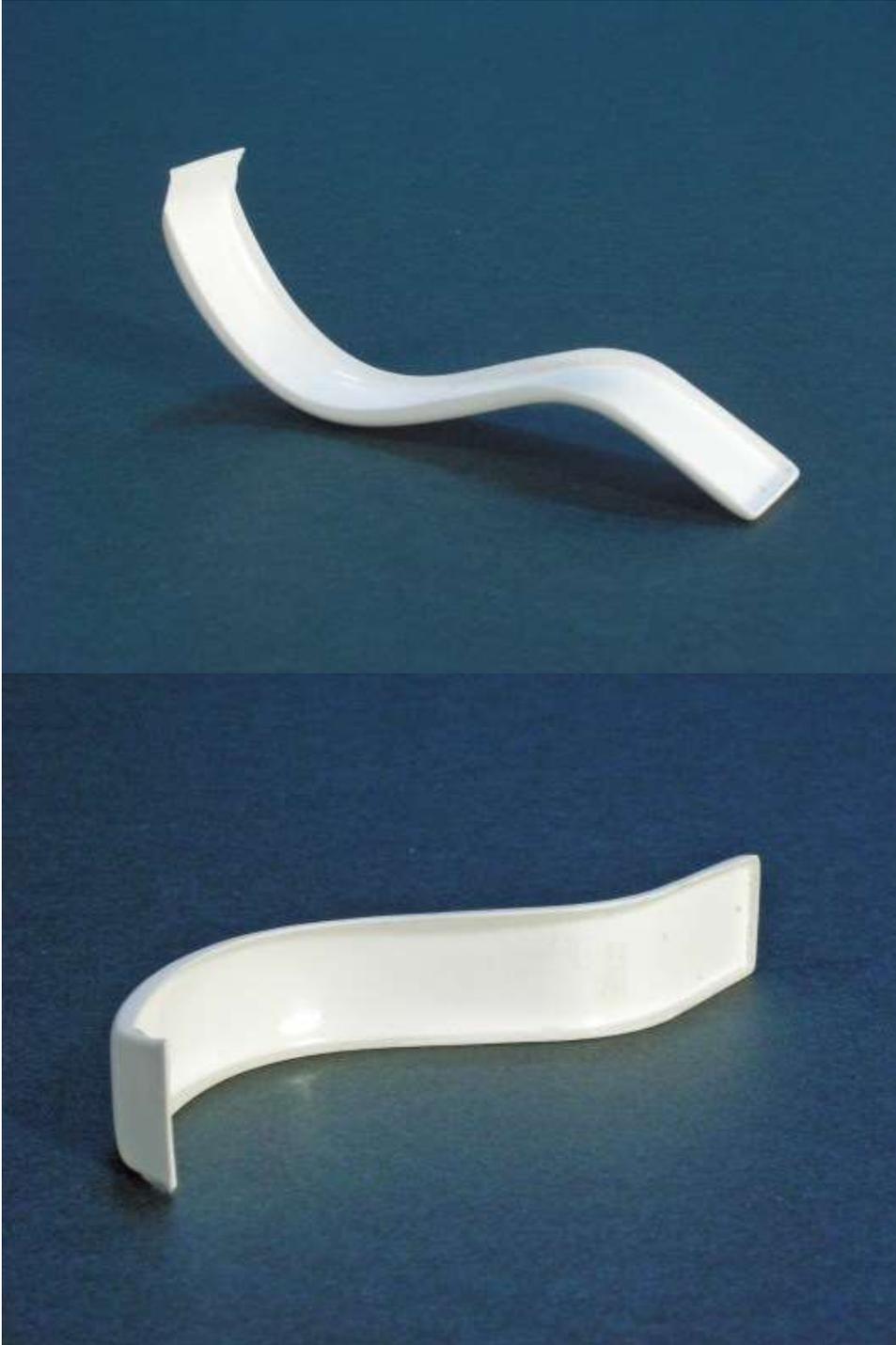


5. Quickly (but carefully, the frames do get warm, I use padded gloves) remove the frame from the oven and centred over the *Master Pattern* place down on the *Vacuum Box*
6. Turn on the vacuum cleaner and watch amazed as the plastic is drawn down and around your *Master Pattern*, turn off the vacuum cleaner.



7. Remove the raising blocks from the oven and switch off the oven
8. Allow the plastic and frame to cool a bit more.
9. Now you can remove the plastic from the frame and start trimming. The *Master Pattern* will be very tight in the plastic so careful trimming is required to remove it without damaging the *Master* or the new part
(Handy hints - I often place a woodscrew in the base of the *Master* after *vacuum forming* and place the screw head in a vise to assist in pulling the formed plastic away from the *Master*)





And another example of what shapes can easily be accomplished





11. If the plastic did not pull down completely over the *Master* you can sometimes place the same sheet frame back in the oven and reheat it and try again. Otherwise its try again with a fresh sheet and try leave it heating a little longer.

Conclusion.

No doubt there will be some trial and error involved when first learning this technique, please persevere as the end results are well worth the effort. Now you have no excuse not to build that 1950's engine with its gracious flowing curved fenders, or those stepped rear fenders for the 1920's chain-driven vehicles. Of course the true advantage of *Vacuum forming* is that once formed the part will retain the new shape and not try to flatten/straighten out as happens when just bending flat plastic sheet into a new shape.

While various books and Internet sites use other variations of the technique i.e. Different box or frame styles, different temperate ranges etc. the method explained here are the results that I have found to work for me (I've used this method for +15 years now), working in 1/35th - 1/24th scales. The main thing is to have a go, then adjust and experiment with the technique till it suits you and the parts you want to create.

Best of luck to those that wish to give it a go.