

Intro

Get a comprehensive insight into how to perform A Class Surfacing and High Quality Reverse Modeling. Immerse yourself into intricacies of real A class modeling with this step by step, detailed modeling process explanation. Just watch this 3 parts video tutorial on my YouTube channel. Additionally, on my blog, you can get a PDF with major points from the tutorials, and download a finalized 3D model together with the scan data to try your hand at.

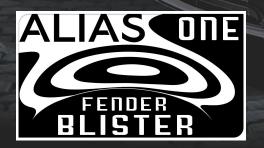


Project Workflow

In this tutorial I work on one of the most complex areas of this car's bodywork. Basically, the task is to blend three different surface patches that will be integrated into one elegant solution.



Each particular video tutorial introduces a modeling process of primary surfaces. These are: Bumper slab surfaces, side body surfaces and fenders. They form the foundation for our final portion of surfacing, which is the blend bumper. Produced geometry has A class qualities. By understanding the tribulations behind A class modeling, you will be able to analyze steps taken, and anticipate steps ahead to achieve very good results relatively quickly, and non-destructively manipulate geometry within 1mm of surface to model deviation.

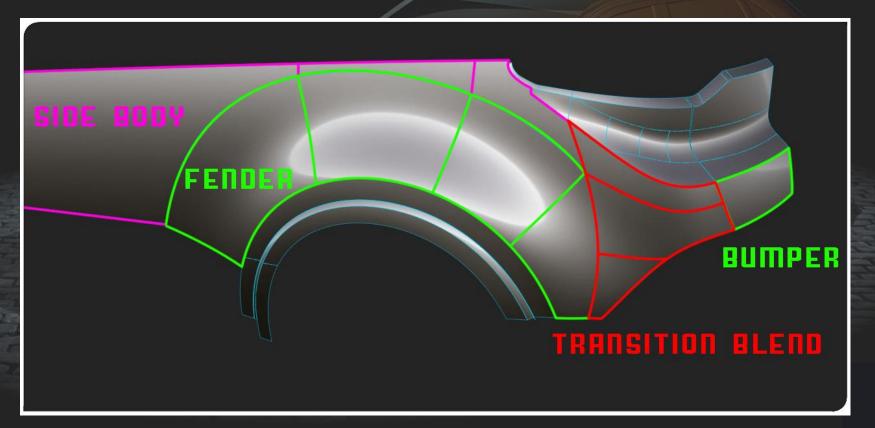


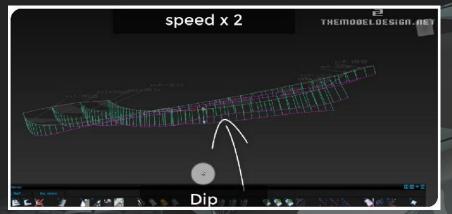




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Bumper slab surfaces, side body surfaces and fenders. They form the foundation for our final portion of surfacing, which is the blend bumper.

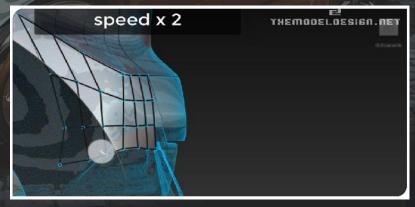




There is a slight dip in here. We will try to push these CVs out just a touch. Quick look at our CV from an acute angle.



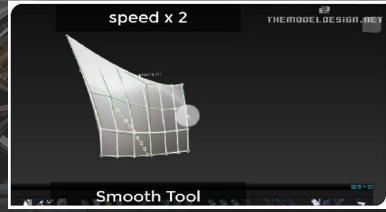
We should do some more work around the corner blend. At the moment, CVs are kind of messy and we need to improve them.



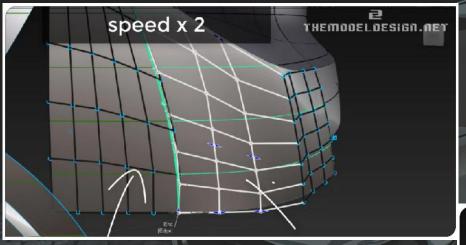


We could make this patch longer that we need, and work on it in this condition for a better insight into geometry





Smooth this surface with a smooth tool and history active



Align and make sure that the side body surface has a clean G3 curvature connection with the transitional blend



Uspre
Com
Com
Con Control
Control
Con Control
Control
Con Control

speed x 3

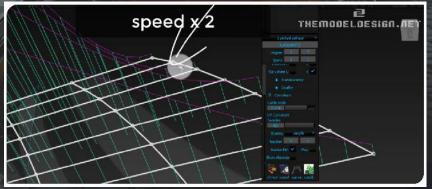
It looks like removing one or two degrees doesn't affect our comb curvature. But what happens If I tried to delete more degrees

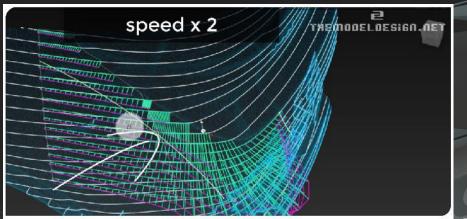


Do you see the scan-surface lattice lines? They don't overlap. You can push in Hulls and at the same time, observe the edge-surface distance

Cross Section Editor

Add more degrees to adjust comb properties of the corner blend





Finally, we achieved G3 continuity in the indicated area and we are ready to build the last portion of geometry to close off the model

End of Part Two

