

FSDS 2.x Tips and Hints

Here are some tips that I find useful when working in FSDS. These are geared towards the beginners but some tips might be found for the advanced user as well. Feel free to contact me with corrections or additions.

Textures

- **Use fewer textures.** Flightsim processes 1 1024x1024 texture faster than 4 512x512 textures. (Even though they take up the same space.)
- **Be efficient.** Place as many part textures on one BMP as possible.
- **Give tires their own texture (you do it for spinning props).** I know it contradicts the rule above but this way you can center it exactly on the BMP thus eliminating wobble from a slightly off-center texture or mis-cropped texture. 128x128 textures are usually plenty large enough.
- **Texture as you build.** It makes texturing parts much easier especially those rotated because of animation.
- **Texture everything.** Parts left un-textured reflect light in a different manner than textured parts and tend to stick out like a sore thumb in some lighting conditions. Worst case scenario, create a small color square in the corner of a texture and use that to texture the part.
- **Use mirrored textures.** If the left and right sides (or top and bottom) are identical but mirrored, save texture space and time by using the Flip X and Y option to reuse a texture.
- **Choose your tool.** Most of the time DXTBMP creates smoother images than MS ImageTool but sometimes it the other way around.
- **Make shadows.** Yes, a wheel well might be technically white but do you ever see it in full light? No, make it darker.
- **Reflection.** More alpha (greyer alpha BMP) = more reflection. Very little is needed for shiny paint.
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Shaping and Moving

- **Use “Check Parts” (Edit > Check Parts)**

It helps reduce unwanted shadows.

Note: While this may result in more polygons appearing it does NOT increase the true poly count of your model. MSFS converts non-triangular polygons to triangles. E.g. 1 square = 2 polygons.

Remember:

- Back-up key parts before performing this process.
- Texture part after performing this process.
- Don't use if no noticeable difference appears. It will only make working on your model harder with all of the extra lines.
- **Use Smoothing Groups (see Smoothing Groups tutorial)**
- **Use Snap to Scale** Eliminate those unwanted gaps on individual parts.
Note: Only works on individual parts.
- **Use Snap to Nearest Vertex.** Eliminate those unwanted gaps between parts.
 - Careful not to snap to the wrong nearest point. Hide points you do not wish to snap to.
 - V key in Point mode.
 - Use after Snap to Scale
- **Use Constrain X, Y, and Z buttons**  to stop in wanted movement when moving parts or points.
- **Use Ctrl + left click and drag key to select multiple Parts or Polygons**
- **Use Shift + left click and drag to move or rotate part axis.**

- **Use Shift + arrow keys to nudge selected parts or points.**
Note: Nudge distance is determined by the value entered under **File > Project Properties > Scale**
- **Use Center Axis to Part and Reset Rotation options under the Part menu.**
- **Use Last Part and First Part option under Part menu.**
Find the last or first part you've worked on fast.

Animation

- **Texture BEFORE animating.** Especially if a part axis needs to be rotated.
- **Move axis and parts into place BEFORE assigning parent/child relationships.**
- **Assign parent/child relationships BEFORE animating.**
- **Use parent/child relationships to bring parts “along for the ride”.**
I.e. A landing light beam attached to a nose gear strut does not have to be animated if it is the child of an animated part.