

Stylized Hollow Muscle Car

For questions or concerns, email justin@justinvoke.com

Models

There are three variants of the muscle car mesh in the models folder including single, double, and multi. The single variant has the entire chassis as a single mesh. The double variant has the chassis mesh with the addition of a separate light cover mesh that can be given a transparent material. The light cover mesh contains the lenses that cover all of the lights on the car. The multi variant has the chassis and light cover meshes along with separate meshes for each group of lights on the vehicle. These are the headlights, brake lights, reverse lights, left blinkers, and right blinkers. These are useful if you want to apply an emissive material to make them light up. Each variant contains a separate wheel mesh as well.

Each mesh variant contains four levels of detail specified with LODX in the name, where the X ranges from 0 to 3 and 0 is the most detailed. If you drag a mesh into the scene, an LOD group will be automatically attached to it.

Colliders

The colliders folder contains three collision mesh variants. They are numbered based on their level of detail from 0 to 2, where 2 is the most detailed. Of the three collision meshes there are single and multi variants. The multi variants split the chassis collider into three separate meshes representing the rear, middle, and front of the car. These allow the car to have more accurate collisions compared to the single variants which have just one mesh for the whole chassis. Each variant also includes a cylinder mesh for the wheel if necessary.

Prefabs

There are prefabs in the prefabs folder prepared for single, double, and multi variants with each paint job applied. They have LOD groups configured and four wheels positioned where they should be.

Materials and Textures

The Materials_Textures folder contains all of the organized materials and textures for the car. Even though some materials, such as the light covers and lights, may appear identical between paint job variants, each unique material contains a reference to the albedo texture associated with its paint job. If you mix materials from different folders, more memory will have to be allotted to the different albedo textures in use even though the models will look the same.

Shaders

There are two different color mask shaders, each with a hard edge and normal variant. The two color mask variants mimic pearlescent paint by blending between 2 main colors based on the color blend value and the view direction. The hard edge variants of the shaders use a hard edge on the color mask that can be shifted slightly based on the mask edge shift value. This is useful when dealing with interpolation and mipmaps where a blurry mask edge can reveal the plain white diffuse texture underneath the color.

The grayscale color mask texture is the mask and all other textures are the same as what you would use on the standard shader.

Source Files

The included zip file contains the original blend model file that can be opened in Blender along with psd textures, UV maps for each LOD, and a baked occlusion texture from the high poly source model. If you are going to bake more textures yourself, make sure to use *musclecar.blend* and not *musclecar_final.blend*. The final one was used for organizing and exporting the final meshes and does not contain the high poly mesh necessary for baking. Make sure to enable the subdivision surface modifier on the high poly mesh, but not before setting the view value to 0 and incrementing it to a value that your system can handle.