

# Welcome!

**Car Engine Animated – i4** is a 100% real model of classic inline four-cylinder 16 valve internal combustion car engine. It includes all the parts real engine has and shows how they work together.

The engine model contains 42145 polygons, 90 separate objects and 99 textures.

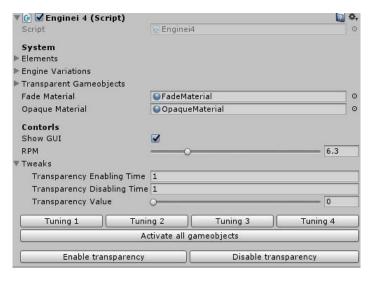
### -How to use:

Just drop the prefab "Enginei4" into a scene and press play. You will see a GUI box with adjustments in the upper right corner. These adjustments are also available from Enginei4 script of the prefab, so you can turn this window off by disabling "Show GUI" checkbox.

### -Components:

- Enginei4.cs the main engine script. It's responsible for all the animation and behaviour.
- Enginei4Editor —script which adds buttons to the Enginei4 script in the inspector.
- FreeCamera simple free camera script.

# -Main script overview:



**System** section contains all necessary for working data.

- Elements array of all engine elements. Don't change it in any way.
- Engine variations engine parts combinations.
- Transparent Gameobjects array of gameobjects that become transparent when you click "Enable

transparency" button.

- Fade material an instance of material with "fade" rendering mode. Necessary for transparency mode.
- Opaque material an instance of material with "opaque" rendering mode. Necessary for transparency mode.

### **Controls** section contains user controls.

- Show GUI shows and hides GUI box on the screen.
- RPM revolutions per minute. Rotation speed of the engine.
- Transparency enabling time time in seconds for which transparency mode turns on.
- Transparency disabling time time in seconds for which transparency mode turns off.
- Transparency value alpha of materials of gameobjects listed in Transparent Gameobjects array in transparency mode (0.0 1.0).
- Tuning 1, Tuning 2, Tuning 3, Tuning 4 buttons for changing engine parts combinations.
- Activate all gameobjects activates all deactivated children of the engine.
- Enable transparency makes gameobjects listed in Transparent Gameobjects transparent.
- Disable transparency makes gameobjects listed in Transparent Gameobjects opaque.

# -Using with Kinematic Car Suspension:

To use the assets together, just make the engine a child of the suspension root and place it as you want. As the engine has rear wheels drive gearbox, I would recommend to deactivate front driveshafts, and driveshaft dusters of the suspension.

# Thank you! For any issues write to <a href="mailto:keereedev@gmail.com">keereedev@gmail.com</a>.