The Thruster Component

This component can be used to create efficient thruster effects. It can also be used to create fully newtonian thruster physics.

Thruster

Observer

If your scene contains a camera tagged with **MainCamera**, then this field will automatically be filled in. If not, then create one and either change its tag to **MainCamera**, or drag it into this field.

Throttle

This allows you to set the target throttle of the thruster.

Tween Speed

This allows you to change the speed at which the actual throttle value moves toward the target throttle value.

Physics

If you tick this, then this thruster will push a rigid body when throttle is applied.

Rigidbody

If your GameObject has a Rigidbody component then this field will automatically be filled in. If not, then add a rigid body, or drag and drop onto into this field.

Force

This field allows you to set the force applied to your rigid body when the throttle is at maximum.

Mode

This allows you to set the thruster force mode. Consult the official Unity documentation if you're unsure what this means.

Type

This allows you to set the thruster force type. Consult the official Unity documentation if you're unsure what this means.

Flame

If you tick this then your thruster will be given a flickering flame effect.

Mesh

This allows you to set the flame mesh. You can open the select mesh window by pressing the ⊙ button. If you then type in **'Thruster Flame'**, you'll see a list of suitable prepackaged meshes.

Material

This allows you to set the flame material. You can open the select material window by pressing the ⊙ button. If you then type in **'Thruster Flame'**, you'll see a list of suitable prepackaged materials.

Note: If you wish to create your own thruster flame materials then you should use the **SGT → Thruster → Flame** shader.

Offset

This allows you to set the local position of the thruster flame relative to the thruster GameObject.

Scale

This allows you to set the scale of the thruster flame when the throttle is at 0.

Change

This allows you to change the amount the thruster flame scale changes when the throttle is increased.

Flicker

This allows you to change how much the thruster flame flickers every frame (e.g. a value of 0.1 means the size will flicker between 90% and 100%).

Flare

If you tick this then your thruster will be given a flickering flare effect (similar to sun glare) that will be hidden behind solid objects.

Mesh

This allows you to set the flare mesh. You can open the select mesh window by pressing the ⊙ button. If you then type in **'Thruster Flare'**, you'll see a list of suitable prepackaged meshes.

Material

This allows you to set the flare material. You can open the select material window by pressing the ⊙ button. If you then type in **'Thruster Flare'**, you'll see a list of suitable prepackaged materials.

Note: If you wish to create your own thruster flame materials then you should use the **SGT** → **Thruster** → **Flare** shader.

Raycast Mask

This allows you to set the mask used by the thruster flare raycast.

Offset

This allows you to set the local position of the thruster flare relative to the thruster GameObject.

Scale

This allows you to set the scale of the thruster flare when the throttle is at 0.

Change

This allows you to change the amount the thruster flare scale changes when the throttle is increased.

Flicker

This allows you to change how much the thruster flare flickers every frame (e.g. a value of 0.1 means the size will flicker between 90% and 100%).

Tween Speed

This allows you to change how fast the thruster flare will fade in/out when it goes behind solid geometry.