

Plugin **Proper Animation** - for SketchUp 6/7/8 Free/Pro

Make SketchUp models live by adding object movements and animation to demonstrate real life states, from closed and opened doors \ windows, to a progress of a construction site or an assembly procedure... etc

This plugin tries to be intuitive and simple to use, to get you results quickly.

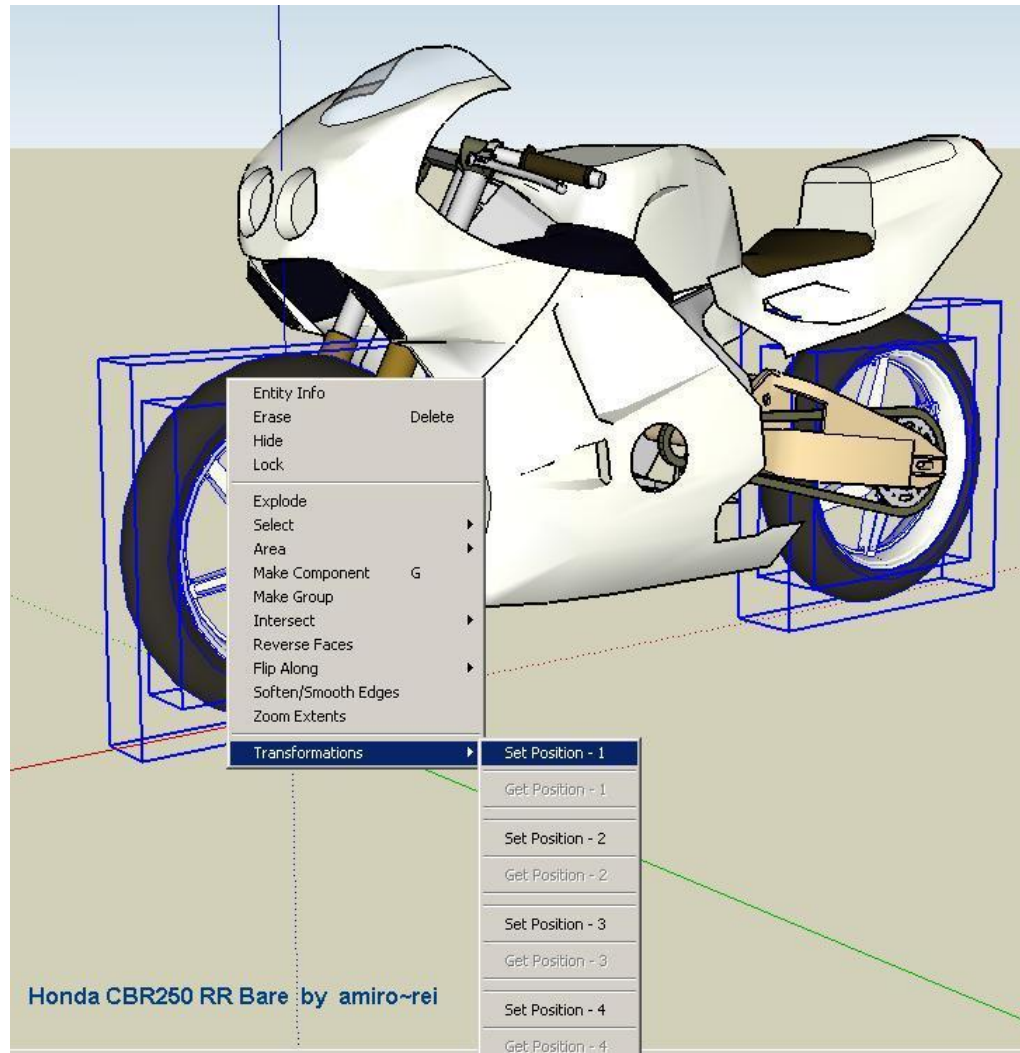
This plugin was developed in the days of Sketchup version 6 and can animate objects using the FREE version of Sketchup. its not restricted to the new Sketchup 7+ “dynamic components” that can have “behaviors” of movement animation and can be designed only using the PRO version of Sketchup 7+.

Installation

- 1) Unzip the downloaded archive file into a temporary folder.
- 2) copy file "**proper_animation_1.xx.rbs**" into your "**Plugins**" folder under your SketchUp install folder
Default install folder location is - "C:\Program Files\Google\Google SketchUp 7\Plugins"
- 3) **Restart** SketchUp and note a new right mouse_click context menu item named "Proper Animation", note new main menu item under "plugins" named "Proper Animation"

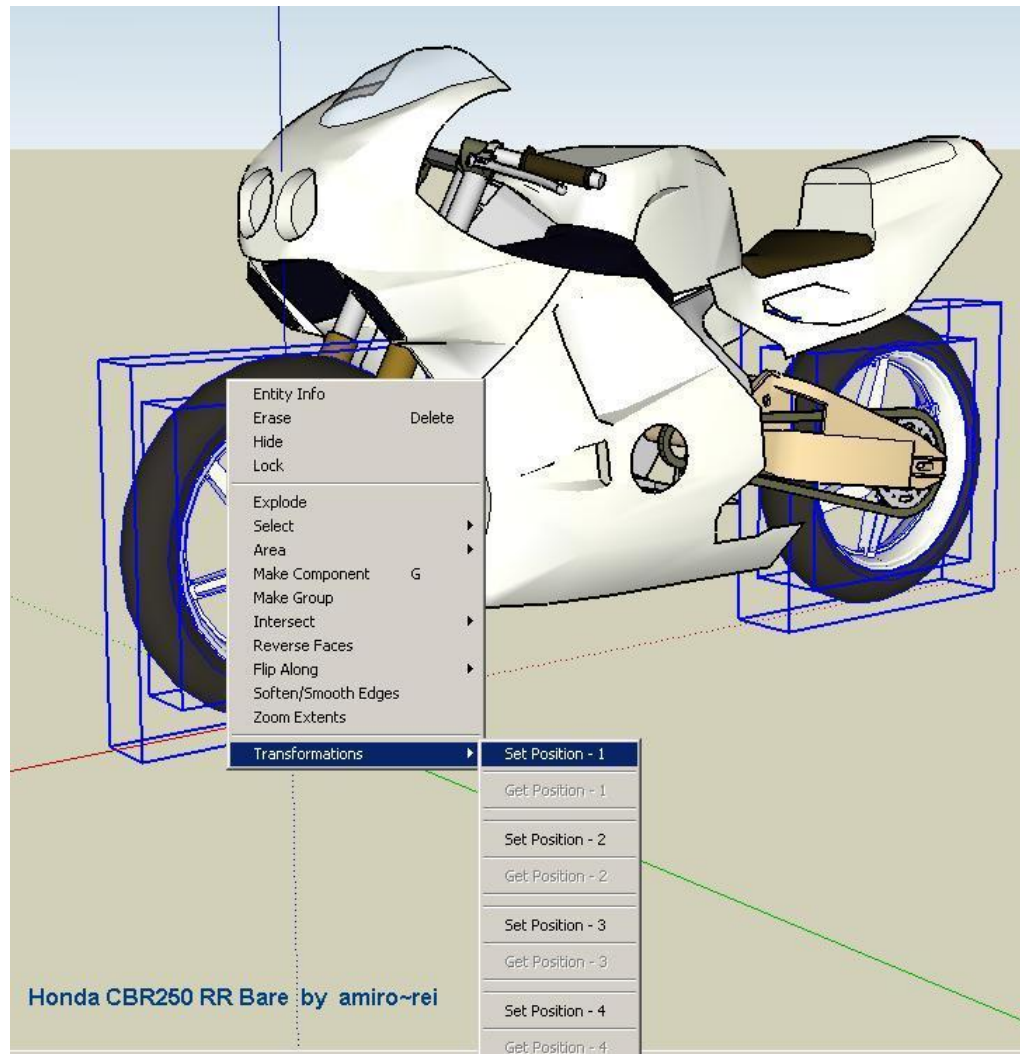
To begin animating

- 1) **select** desired group(s) and/or component(s) for animation
 - 2) Set **first** position by - Right_mouse_click -> **Proper Animation** -> Set Position 1
 - 3) Move the **selected** object(s) to a new location using Sketchup's "move" tool
 - 4) **Set** an additional position by - Right_mouse_click -> **Proper Animation** -> Set Position X
- * note - in picture below "Transformations" instead of "Proper Animation"*



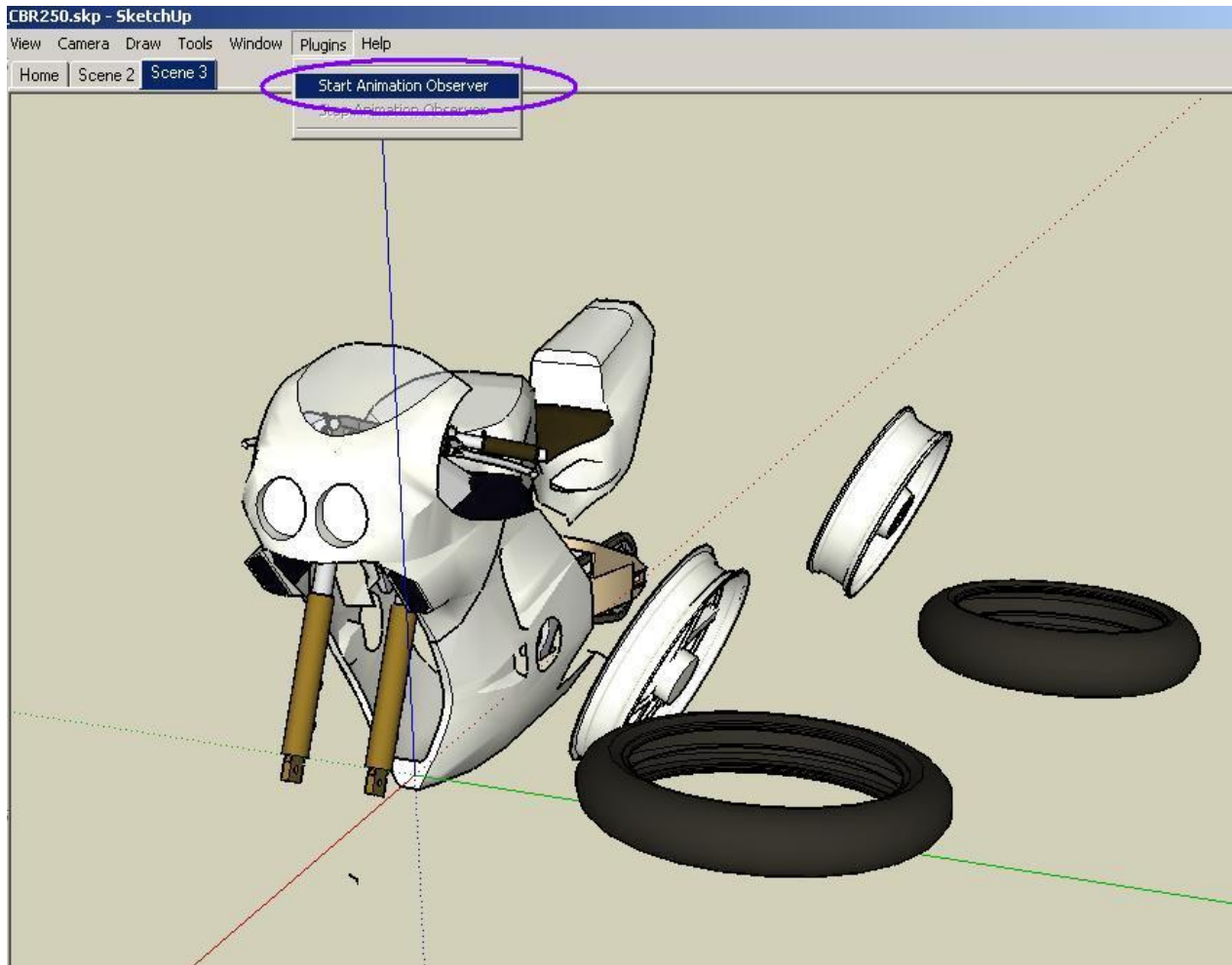
To manually preview animation position settings

- 1) **select** desired group(s) and/or component(s)
- 2) right_mouse_click -> Proper Animation -> **Get** Position X
- 3) If Get Position X - is grayed out (unavailable) - it means that not **all** currently selected objects have Position X set
- 4) Modify your objects **selection**, or select single objects to test



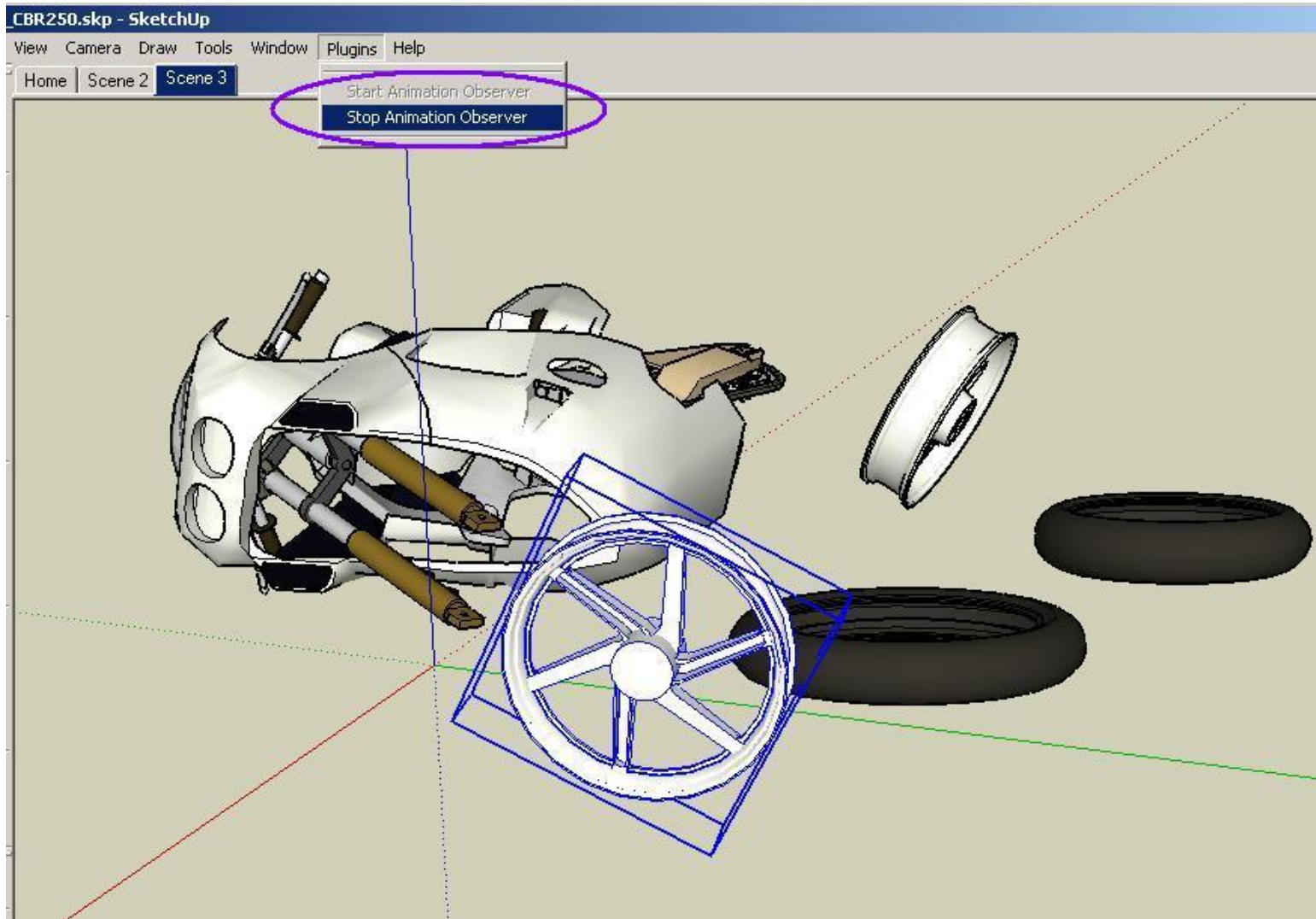
To **link** objects animation to trigger with “**scenes**” selection changes

- 1) **Add** scenes to your model
- 2) Menu -> Plugins -> Proper Animation -> **Start Scenes observer**
- 3) select the **first** scene tab to move objects to saved Position **1** ,
select the **second** scene tab to move objects to saved Position **2** , etc
- 4) Menu -> Plugins -> Proper Animation -> Stop Scenes observer



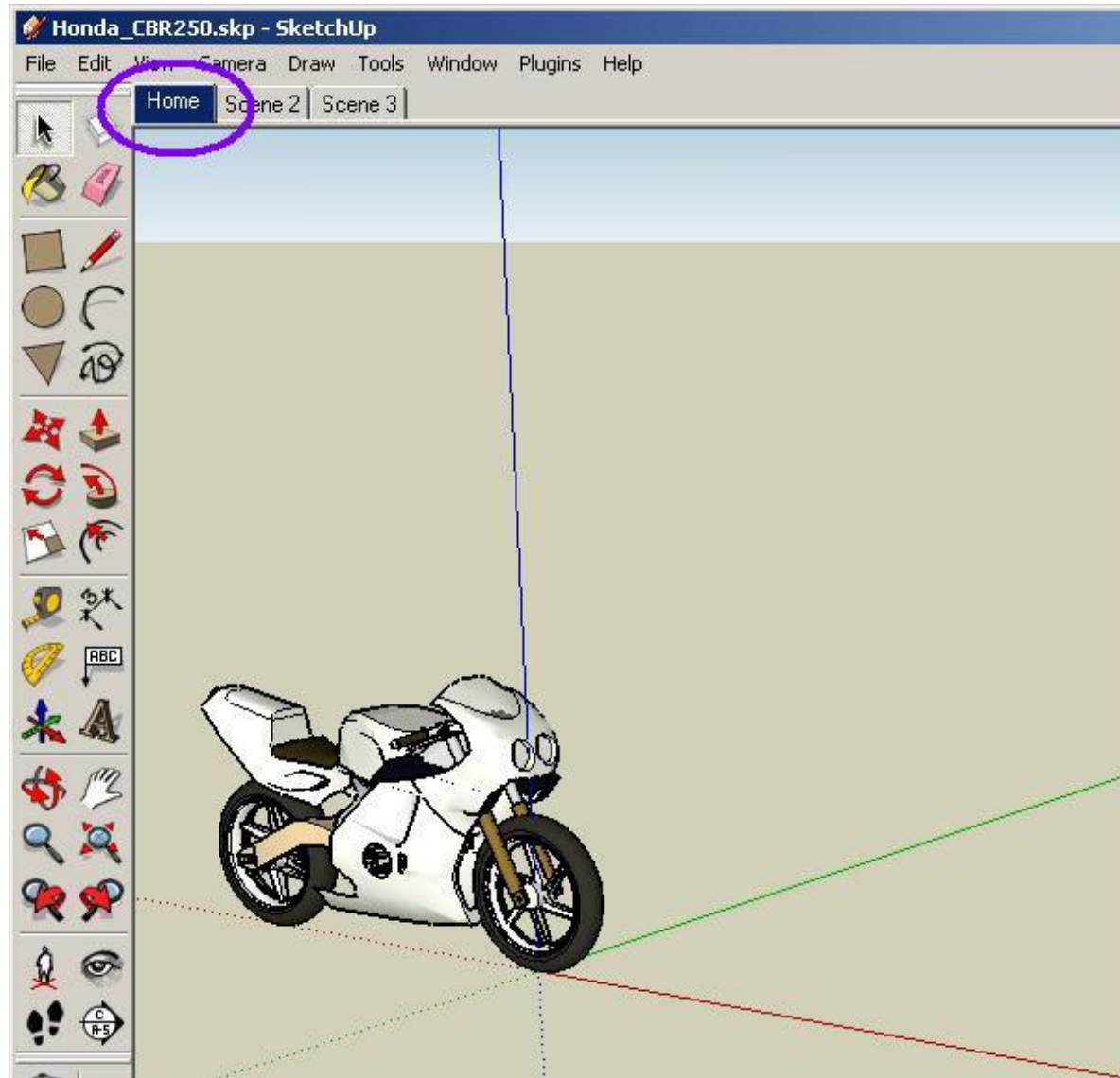
To **Unlink** objects animation with “**scene**” changes, in order to “set” new adjusted positions

- 1) Menu -> Plugins -> Proper Animation -> **Stop Scenes observer**
- 2) Stop and Start again Animation Observer to reflect **new** set positions
if you have set new positions while the “Scenes observer” was still started



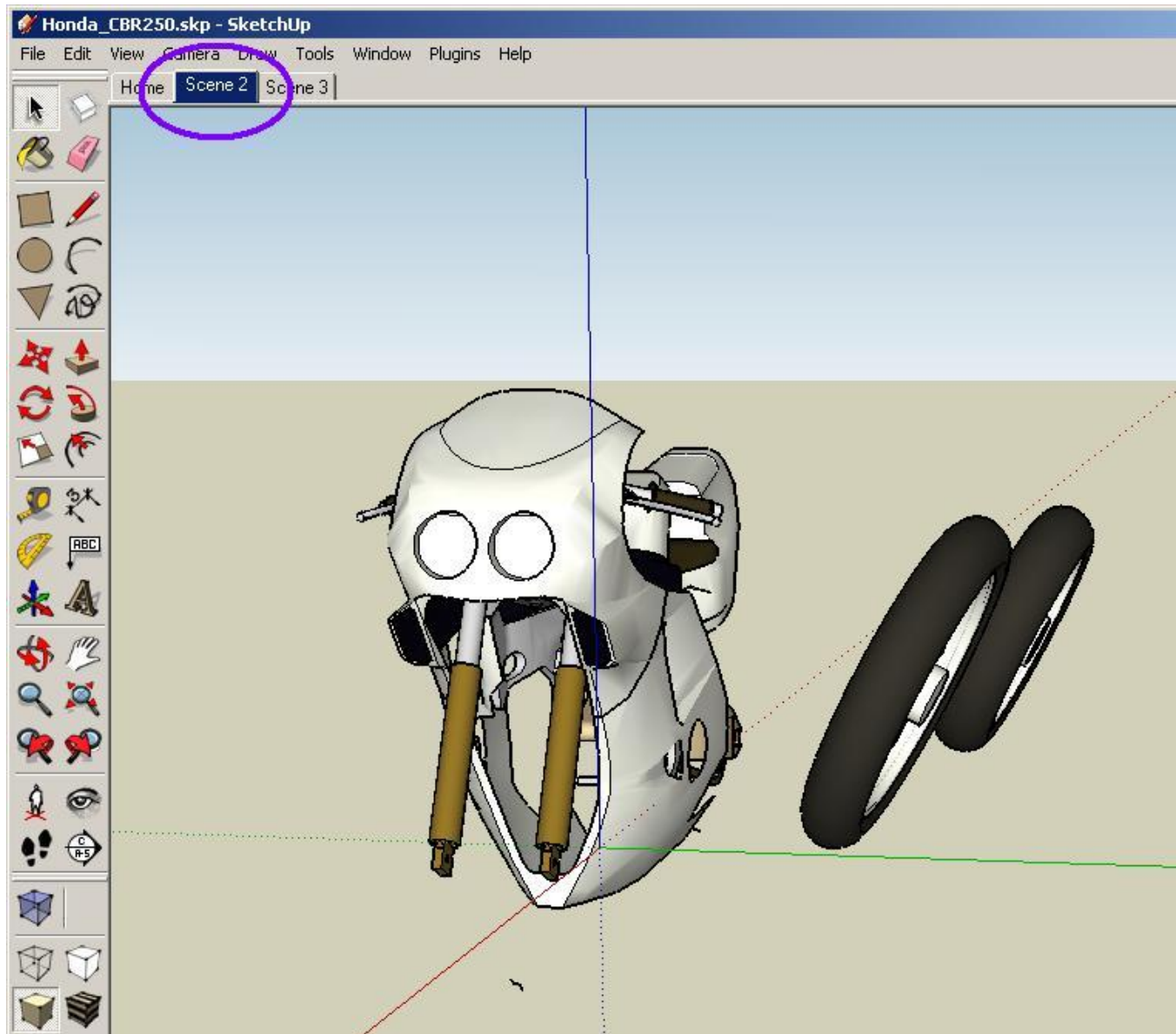
Test Proper Animation with “**scenes**” selection, after you are done Setting positions

- 1) Menu -> Plugins -> Proper Animation -> **Start Scenes observer**
- 2) Select desired scene



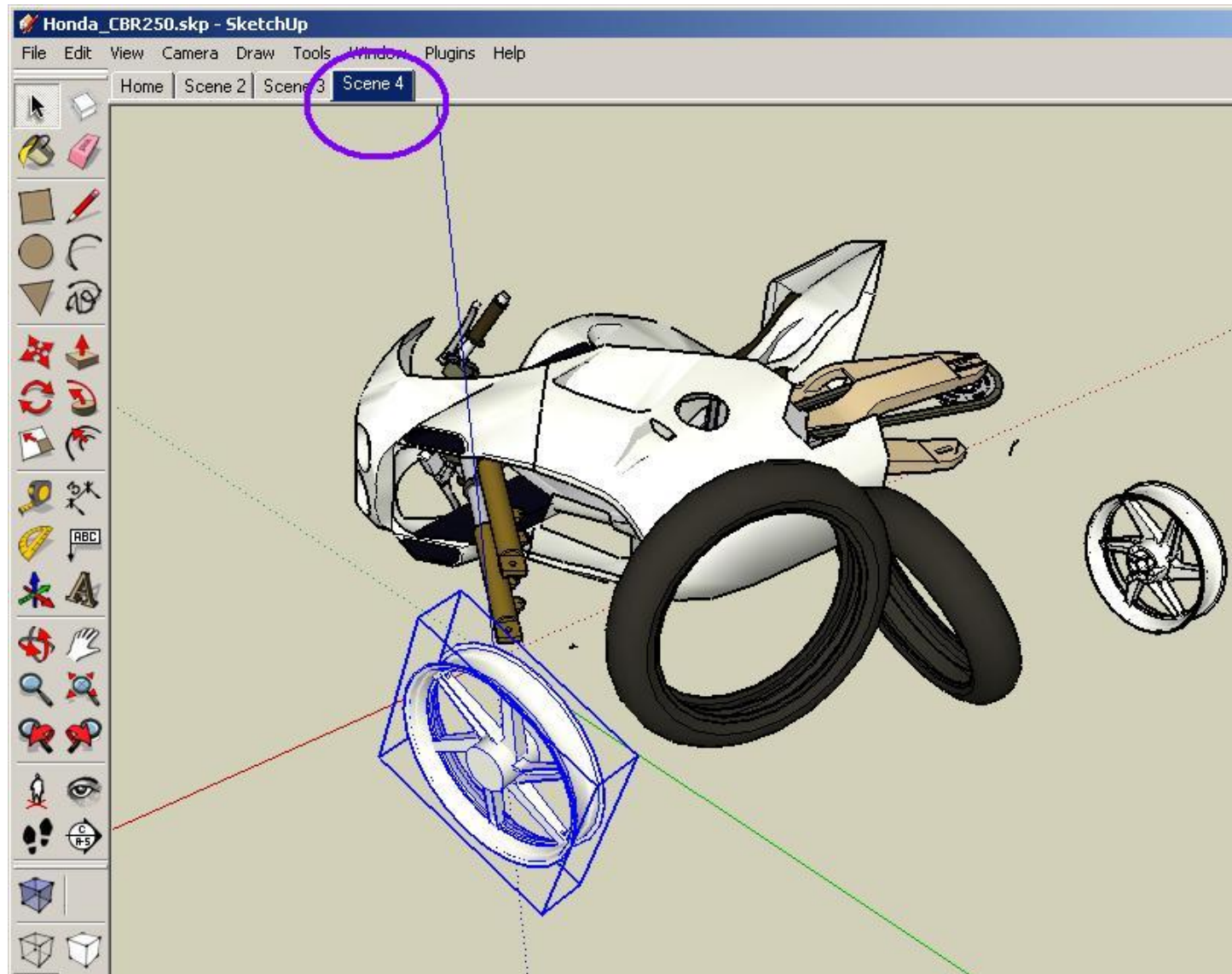
Test Proper Animation with “**scenes**” selection, after you are done Setting positions

1) Select another scene



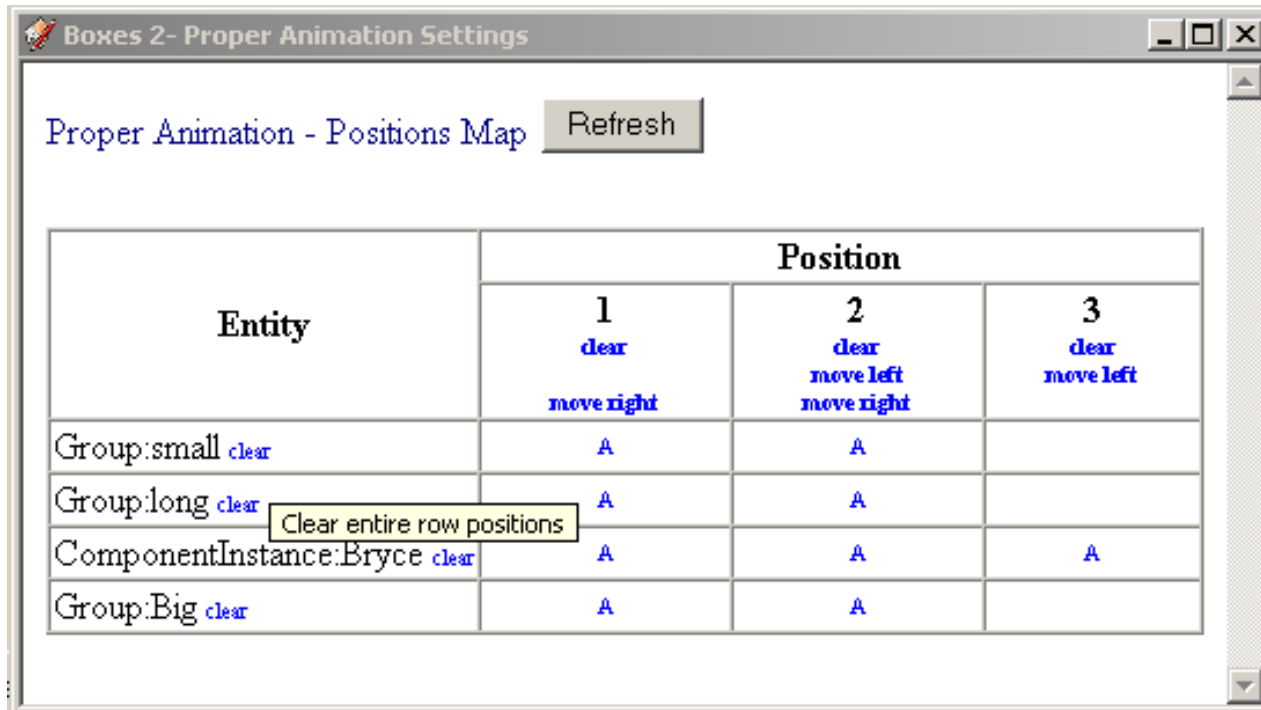
Test Proper Animation with “**scenes**” selection, after you are done Setting positions

- 1) Select another scene
- 2) yet another scene



To **Clear, Move, Review** position settings use the Proper Animation “Attributes map”

- 1) Menu -> Plugins -> Proper Animation -> **Show Animation Attributes Map**
- 2) Click on desired links, and Confirm or Cancel



The screenshot shows a window titled "Boxes 2- Proper Animation Settings". Inside, there is a section titled "Proper Animation - Positions Map" with a "Refresh" button. Below this is a table with the following structure:

Entity	Position		
	1 clear move right	2 clear move left move right	3 clear move left
Group:small clear	A	A	
Group:long clear	A	A	
ComponentInstance:Bryce clear	A	A	A
Group:Big clear	A	A	

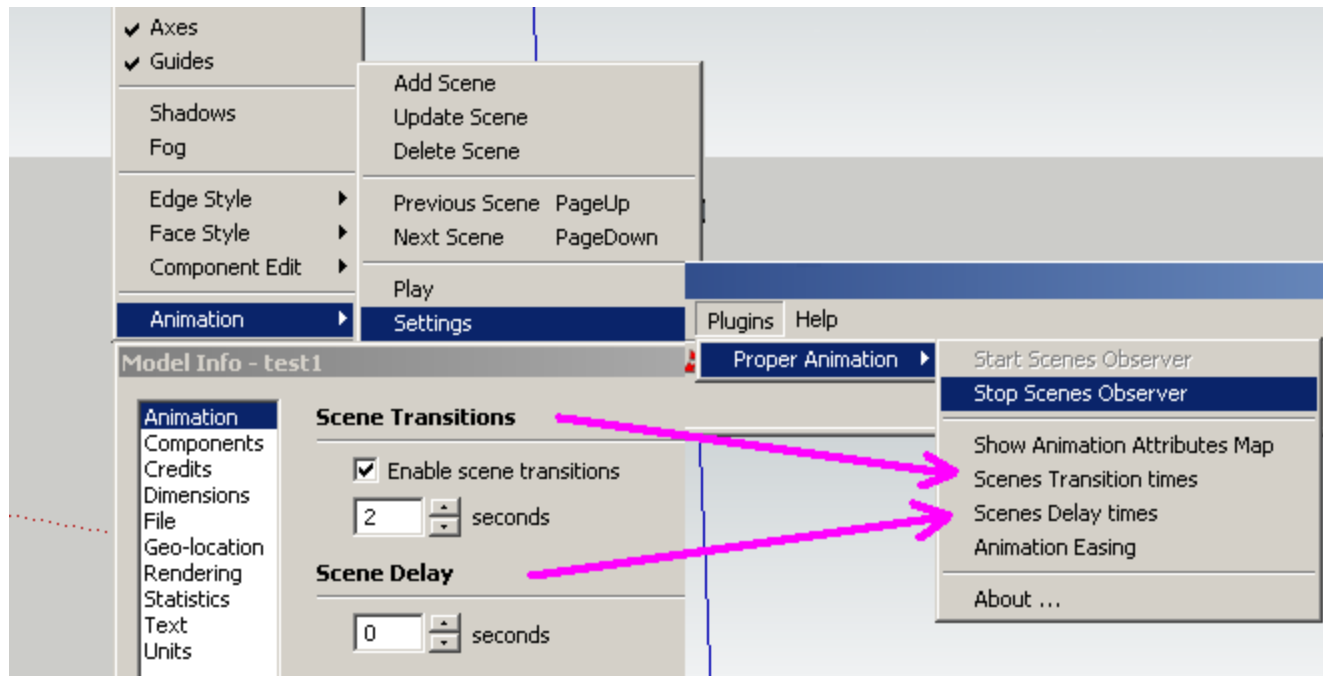
A tooltip "Clear entire row positions" is visible over the "Group:long clear" row.

To fine tune each animation scenes transition time and delay

1) Menu -> Plugins -> Proper Animation -> **Scenes Transition Times**

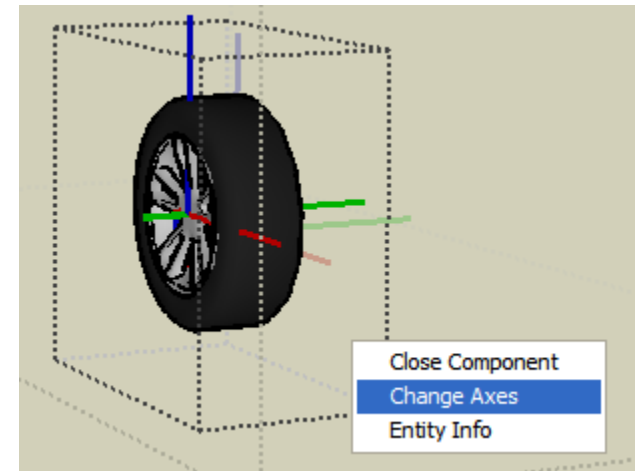
2) Menu -> Plugins -> Proper Animation -> **Scenes Delay Times**

value of -1 is Sketchups default for all scenes, model wide



Known Issues

- 1) Menu --> file --> export --> animation - the 'standard' export does not animate objects you should use third party rendering solutions that do support exporting rendered animated objects from Sketchup SU2KT, Twilight Render , probably most renderers, if not all.
Alternatively hide the axes and use a screen capture utility while playing the animation.
- 2) Strange "rotation" axis while animating, due to where the Component Axes is set
Every component created in SketchUp has its own set of 3D axes associated.
You can change a component's axes using the right-click 'Change Axes' menu.
to animate a rotating wheel, create a wheel component and place the axes in the center of the wheel



make sure your groups are closed, try exploding and closing

- 3) Turning "on" Sketchups shadows might also help
- 4) For more relevant information and advice follow this Sketchuaction forum thread - <http://forums.sketchucation.com/viewtopic.php?f=323&t=10946>