

## Kerbal Space Program - Feedback #9516

### Wheel Collider Offset for individual wheels

04/27/2016 01:30 AM - Angel-125

<b>Status:</b>	Needs Clarification		
<b>Severity:</b>	Normal		
<b>Assignee:</b>			
<b>Category:</b>	Parts		
<b>Target version:</b>			
<b>Version:</b>	1.1.0	<b>Language:</b>	English (US)
<b>Platform:</b>	Windows	<b>Mod Related:</b>	No
<b>Expansion:</b>			

#### Description

With KSP 1.1's changes to wheels, there are cases where wheels will collide with parts around them and report that they are blocked. Sometimes though, the blocked state doesn't make sense. For instance, here is one example of a custom wheel I made where visually the wheel is not blocked but the game is reporting it as blocked. First, here is the Unity asset:

ouNevcL.png

As you can see the wheel collider is nearly the size of the wheel itself. Both in Unity and in the config file, its wheel radius is 0.4.

Here is an image of the wheel in use:

iQMvq62.png

In this view, the front wheels are blocked even though visually they aren't.

One solution to this problem is to change these variables in settings.cfg:

```
WHEEL_CLIP_OFFSET = 0
```

```
WHEEL_CLIP_RANGE = 1
```

```
WHEEL_CLIP_MULTIPLIER = 1.05
```

While technically that would work, it would affect all wheels. If clip offset, range, and multiplier does not currently exist in the ModuleWheel... part modules, it would benefit modders to have these fields available in order to customize modded wheels without affecting every wheel in the game.

Thanks for creating such a great game and making it readily moddable. :)

#### History

##### #1 - 04/27/2016 09:31 AM - Arsonide

Please use the forum for modding support. You need to set the non-wheel colliders on your model to the WheelCollidersIgnore layer. This will make wheels and wheel block checks pass through them, but make them solid to other parts.

##### #2 - 04/27/2016 03:07 PM - Angel-125

Arsonide wrote:

Please use the forum for modding support. You need to set the non-wheel colliders on your model to the WheelCollidersIgnore layer. This will make wheels and wheel block checks pass through them, but make them solid to other parts.

Thanks for your reply. :) I've actually done that with the modded wheel. The issue is that the cab has colliders on it that results in the wheel considering that it is blocked. I can duplicate the issue with stock parts as well, like so:

yY9s911.png

To me, the wheels should not be blocked but they are. This stock configuration is quite similar to my modded parts. The only workaround I've found is to set the colliders on the crew cab (the equivalent would be the girder laying cross-wise) to WheelCollidersIgnore. However, that prevents crew transfers from occurring via the CrewTransfer button if the part can be crewed.

Hope that helps. :)

##### #3 - 07/17/2016 09:48 AM - TriggerAu

- Status changed from New to Needs Clarification