

Kerbal Space Program - Bug #28370

Kerbals on EVA overly resistant to vertical acceleration

07/29/2021 10:09 PM - Jonassoe

Status:	New	Start date:	07/29/2021
Severity:	Low	% Done:	0%
Assignee:			
Category:	EVA		
Target version:			
Version:	1.11.1	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:	Core Game		
Description			
<p>In 1.11, a new feature was added to prevent Kerbals and vessels from sliding around by "anchoring" to the ground. However, this also applies in the vertical direction, which has two unintended side-effects:</p> <ol style="list-style-type: none">1) The RCS thruster pack takes a long amount of time to get Kerbals airborne, as if Kerbals are super heavy until the moment their feet leave the ground2) Stock elevators/lifts no longer works, which is a shame for players who like to make functional buildings with the Breaking Ground robotics parts. <p>DESCRIPTION:</p> <p>Kerbals on EVA have an unnaturally large amount of inertia in the vertical direction when standing still.</p> <p>HOW TO REPLICATE:</p> <ol style="list-style-type: none">1) Go to the Mun or any other low-gravity body2) Get a Kerbal on EVA, and press R to activate the thruster back3) Hold shift. Instead of immediately leaving the ground, the Kerbal will stand still for a while, only very slowly accelerating up. <p>Alternatively:</p> <ol style="list-style-type: none">1) Build any craft that uses pistons or servos to move a horizontal platform up and down2) Get a Kerbal on EVA to stand on the platform3) Activate the robotic part(s) to move the platform up or down. The Kerbals will seem stuck in their position, only snapping out of it after a while when the robotic part(s) have overcome their inertia. I have including videos of this, one video showing the wanted behaviour from before 1.11.			

History

#1 - 07/29/2021 10:16 PM - Jonassoe

Video of the bug affecting stock elevators: <https://i.imgur.com/GDUm8fj.mp4>

Video from before the patch that introduced the bug: <https://i.imgur.com/E6lYutr.mp4>

An obvious work-around to the effect it has on Kerbals' thruster pack is to just jump before you fire the thruster pack.

#2 - 07/30/2021 11:19 PM - Deepspeed

I've noticed this for a long time, but I think it's a "feature, not a bug" kinda thing.

If you go on EVA and hold shift, you will see the throttle indicator slowly slide upward for about 2 seconds before reaching full throttle. It seems like the EVA jetpacks don't instantly output 100% throttle, but instead they slowly build up to that over a few seconds.

So if you're already in the air/orbit, a tiny puff from the jetpack may move you easily, but while you're on the ground, it takes a little time to build up enough throttle to lift the kerbal above the surface, and then they move freely with smaller forces applied.

That being said, it does seem as if the kerbals "stick" to the ground a bit more than they should, and IDK what the problem is with the platforms.

I usually just jump before using the jetpack as well.