

Kerbal Space Program - Bug #17830

LY-01 Bouncing Issue

03/07/2018 04:14 AM - GarrettMoody

Status:	Investigating	Start date:	03/07/2018
Severity:	Normal	% Done:	20%
Assignee:			
Category:	Physics		
Target version:			
Version:	1.4.0	Language:	English (US)
Platform:	OSX, Windows	Mod Related:	No
Expansion:	Core Game		

Description

I built a plane using the LY-01 Fixed Landing Gear and clicked the "Launch" button, bringing me to the (Dirt Level 1) runway. After the physics initiated, the plane continues to bounce on the runway. In my situation (how I noticed it in the first place) was my plane bounced so high, when landing it blew up the landing gear. I have retested this by building other "planes" and it appears the problem still exists.

The easiest/quickest way to test this is to build a land rover, with the Probodobodyne OKTO, 2 MK0 Liquid Fuel Fuselage, and 4 LY-01 Fixed Landing Gear (picture of Test Rover attached). Click the "Launch" button. Once the physics start, you will notice the rover bouncing on the runway, and it doesn't stop.

It appears the heavier the vehicle, the harder it will bounce, making it impossible to takeoff with a plane.

History

#1 - 03/07/2018 04:21 AM - GarrettMoody

- File *Screen Shot 2018-03-06 at 10.18.47 PM.png* added

I am confident this bug was introduced in 1.4 because I had saved the plane in the picture below in the previous version. Now after downloading 1.4 this is the plane that bounces so high after clicking the "Launch" button that the landing gear blows up.

#2 - 03/07/2018 06:42 PM - Anth12

Interesting...got a quicksave or the craft file?

#3 - 03/08/2018 01:28 AM - GarrettMoody

- File *(Un)manned Plane.craft* added

Anth12 wrote:

Interesting...got a quicksave or the craft file?

Here is the .craft file of the second plane. I just tested it again, and after letting it sit (bounce) on the runway for about 5 seconds the landing gear exploded again.

#4 - 03/08/2018 04:34 AM - Anth12

- File *1_3_1 (Un)manned Plane.craft* added

- Platform *Windows* added

Windows 10
Steam KSP 1.3.1
Steam KSP 1.4

Thanks for the supplied craft.
Definitely a problem there.

I recreated the plane in 1.3.1 using the supplied one in 1.4 and tested it first in 1.3.1 and then 1.4.

In 1.3.1 it bounces a few times and recovers
In 1.4 it bounces and bounces and then something explodes.

Oh tested in windows 10

Confirmed...wait wheres the ability to confirm the bug?

#5 - 03/08/2018 01:23 PM - GarrettMoody

- Status changed from New to Confirmed

- % Done changed from 0 to 10

Setting the status to confirmed per Anth12 request.

#6 - 03/10/2018 12:27 PM - GoSlash27

I can confirm that, and the LY-05 does it too. As a workaround, try setting the damper to about 1.6 for the LY-01 and 2 for the LY-05. That helped in my case.

Best,
-Slashy

#7 - 03/10/2018 06:46 PM - GarrettMoody

GoSlash27 wrote:

I can confirm that, and the LY-05 does it too. As a workaround, try setting the damper to about 1.6 for the LY-01 and 2 for the LY-05. That helped in my case.

Best,
-Slashy

Thanks for the update Slashy! That definitely does help. I actually set the spring strength to about 0.2 and that completely solved the issue as well. I'm starting to wonder if this is actually a bug or if the developers intended this behavior. I find it odd though that the default settings of spring strength 1 and dampener strength 1 makes the vehicle bounce so much it destroys the landing gear. Regardless, it would appear the spring strength is too sensitive. I will leave it as a bug for now until a developer gets the chance to look at it.

#8 - 03/14/2018 10:22 PM - Squelch

- Status changed from Confirmed to Investigating

- % Done changed from 10 to 20

- Expansion Core Game added

Thanks for the detailed information. Improvements have been made to wheel and terrain intersection in general, but this has not worked in all cases and some craft are unstable.

Files

Screen Shot 2018-03-06 at 10.07.39 PM.png	299 KB	03/07/2018	GarrettMoody
Screen Shot 2018-03-06 at 10.18.47 PM.png	324 KB	03/07/2018	GarrettMoody
(Un)manned Plane.craft	34.8 KB	03/08/2018	GarrettMoody
1_3_1 (Un)manned Plane.craft	36.9 KB	03/08/2018	Anth12