

## Kerbal Space Program - Bug #15391

### Struts/Fuel lines clipped inside of parts cause craft explosions

05/28/2017 04:30 AM - Yargnit

<b>Status:</b>	Closed	<b>Start date:</b>	05/27/2017
<b>Severity:</b>	High	<b>% Done:</b>	100%
<b>Assignee:</b>			
<b>Category:</b>	Physics		
<b>Target version:</b>	Not Applicable		
<b>Version:</b>	1.3.0	<b>Language:</b>	English (US)
<b>Platform:</b>	Windows	<b>Mod Related:</b>	No
<b>Expansion:</b>			

#### Description

The new strut/fuel line models cause physics to freak out and or explode upon vessel loading if the strut (I believe specifically the second end placed) is clipped inside of another part.

Attached is a simple 6 part craft with a central fuel tank, that has smaller tanks radially attached to it. the radial tanks are then gizmo'd in to allow struts to be places so they are inside the model. If this craft is loaded to the flight scene it will explode. If you delete the struts and launch the craft again it will work just fine. Fuel lines appear to do similar, though sometimes not quite as aggressively.

This also means that any craft in existing saves from 1.2.2 that are already launched and have struts clipped inside will explode the 1st time the craft is loaded in the flight scene in 1.3, potentially destroying peoples long term ongoing saves.

#### History

##### #1 - 05/28/2017 04:36 AM - JohnTAss

- File *Strut Craft.craft* added

I can confirm that this happens to me as well. Craft file attached.

##### #2 - 05/28/2017 05:33 AM - ImJeffafa

- File *Glados-EF-TankerTest.craft* added

##### #3 - 05/28/2017 05:38 AM - ImJeffafa

- File *Strut Testing.craft* added

I am also testing this strut thing and I have 4 fuel tanks radially attached to a srb for support and 8 struts in 4x symm going inbetween the tanks at the top and bottom of them, putting a panel flushed with the top of the tanks makes them jump through the fairing which is close to the tanks causing an explosion.

<https://gyazo.com/f87f9757eac724d691ddd1c98f1e9fab> like this but I have the no crash damage on in this gif and this is what the payload looks like <https://gyazo.com/c490bec2258610c2b64dbb8ea8722333>

Edit: Wrong Craft File uploaded, Strut Testing.craft is the right one

##### #4 - 05/28/2017 03:39 PM - swjr-swis

- Status changed from *New* to *Confirmed*

- % Done changed from *0* to *10*

1.3.0.1804 Win x64

Confirmed explosive potential with the uploaded craft when the struts are left in place, no explosion when struts removed.

##### #5 - 05/29/2017 05:33 AM - Yargnit

Adding another note, since fairings (unless inline) are solid until you deploy them, struts now (at least with some configurations) detonate inside of fairings even if they aren't clipped inside any actual objects. I haven't had time to thoroughly test multiple scenarios of this but I did come across it this evening.

**#6 - 06/12/2017 04:34 PM - bewing**

- Status changed from *Confirmed* to *Ready to Test*
- Target version set to *Not Applicable*
- % Done changed from 10 to 80

**#7 - 08/24/2017 10:54 PM - Anth12**

GOG 1.3.0.1804 Clean Install  
Steam 1.3.1.1836 Clean Install

Using the crafts attached to this bug report I can reproduce the bug in 1.3.0.1804 but cant reproduce it in 1.3.1.1836

Fixed

**#8 - 03/30/2018 08:02 AM - Anth12**

- Status changed from *Ready to Test* to *Resolved*
- % Done changed from 80 to 100

I have the ability to resolve this here now

**#9 - 10/15/2018 07:04 PM - joshua.collins**

- Status changed from *Resolved* to *Closed*

**Files**

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Strut Explosion.craft	14.3 KB	05/28/2017	Yargnit
Strut Craft.craft	12.9 KB	05/28/2017	JohnTAss
Glados-EF-TankerTest.craft	157 KB	05/28/2017	ImJeffafa
Strut Testing.craft	167 KB	05/28/2017	ImJeffafa