

Kerbal Space Program - Bug #16687

Autostrut Breaking Ships

11/26/2017 05:14 AM - BuzzLightFear

Status:	Not a Bug	Start date:	11/26/2017
Severity:	Unworthy	% Done:	0%
Assignee:			
Category:	Parts		
Target version:			
Version:	1.3.1	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:			

Description

When auto strut is used on ships and set to root part it breaks the ship by making it wobble itself to destruction.

History

#1 - 11/26/2017 11:47 AM - Azimech

- Severity changed from Normal to Unworthy

It's useful to learn how to use autostruts. They're an advanced tweakable and it is widely known wrong use of them can create problems. After a lot of experimentation most people have discovered using "heaviest part" is unreliable when using rockets or space vehicles with moderate to high part count and use a lot of fuel: autostruts dynamically start hopping between parts as fuel tanks get drained, invoking the kraken. As you have noticed too many autostruts on "root" invokes the kraken as well and therefore the best option is to use something like 80% "grandparent part" and 20% "root" part. Your experience may vary. Sometimes it's a good idea to add normal struts as well to create triangles, the strongest geometrical structures known to man.

#2 - 11/27/2017 08:07 PM - Kasuha

If the feature is unreliable in such a way, maybe it should be reconsidered and reimplemented. The idea of autostruts was to improve reliability of builds.

For most of physics, parts are represented by their center of mass and mass of the part. Perhaps the good solution would be evaluating a voronoi diagram for all massive part centers, and then drawing a strut between each two parts that are not connected yet (directly or with a strut) and share a face in the diagram. Since libraries to calculate voronoi diagrams are easy to come by and fairly efficient, it shouldn't be even hard to implement.

#3 - 08/12/2019 02:25 PM - Robert.Keech

- Status changed from New to Not a Bug

Not a bug. Feedback.