

Kerbal Space Program - Bug #25017

Launch Clamps, Hardpoints, and Radial Decouplers Misbehaving

03/10/2020 01:04 AM - m_creech

Status:	New	Start date:	03/09/2020
Severity:	Low	% Done:	0%
Assignee:			
Category:	Parts		
Target version:			
Version:	1.9.1	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:	Core Game		

Description

First noticed this in 1.8.1 but didn't get around to testing until now.

The expected behavior for these parts is that whatever is attached to the mating surface detaches when staged, along with the decoupler or hardpoint itself in those cases. Current behavior is that the part detaches from whichever section of the ship contains the root part. That is fine most of the time and would not be noticed.

I had rigged up a target drone and fighter plane to play "dogfight" in version 1.6. The drone is connected to the launch clamp, and the fighter is connected via a small hardpoint to I-beams branched off of the launch clamp tower. This worked well until the 1.8 update when the hardpoint would no longer disconnect from the fighter, detaching from the I-beam instead. Moving the root part onto the fighter (from the drone) created worse trouble, as staging the launch clamp jettisoned the whole structure with the fighter attached, and left the drone hanging. I have created several test craft to demonstrate as they show the problem better, and am including photos and files.

The craft "clamp test" only functions as expected if the root part is in the rocket attached to the clamp. If the root part of the craft "dcplr test" is in the stand, both rockets will fly off still connected to the TT-70 decoupler. The craft "dcplr test 2" is a simple liquid rocket with two Flea SRBs. Placing the root part in one of the SRBs causes the file to glitch (I've named the glitched version "dcplr test 2a"). Notice with the decouplers that the "attach point" graphics always remain with the root part regardless of which part they were connected to, and likewise the decoupler structure and mass remain stuck to whatever was not the root.

To test: In the editor, select one of the OKTO2 probe units on any of the craft as the root (although any part works, the OKTO2s are convenient). Launch the craft to the runway. Stage to trigger decouplers/ clamps/ engines. The error in "dcplr test 2a" craft is obvious in the editor without having to launch.

Workarounds: At present, simply don't do anything unusual with clamps, radial decouplers, or hardpoints, i.e. they should all point "away" from the root part.

Note- Did not test the Hydraulic Detachment Manifold, assumed to have the same problem. Also did not test the stack decouplers or separators.

-Steam install, no mods, Windows 10 64bit v1903

History

#1 - 03/10/2020 01:08 AM - m_creech

- File *dcplr test 2.craft* added

- File *dcplr test 2a.craft* added

Adding two more craft files.

Files

File Name	Size	Date	Author
dogfight practice rig.png	244 KB	03/10/2020	m_creech
clamp test before.png	309 KB	03/10/2020	m_creech
clamp test after.png	334 KB	03/10/2020	m_creech
dcplr test correct.png	233 KB	03/10/2020	m_creech
dcplr test opposite.png	285 KB	03/10/2020	m_creech

dcplr test conjoined.png	220 KB	03/10/2020	m_creech
dcplr test 2a before.png	812 KB	03/10/2020	m_creech
dcplr test 2a after.png	563 KB	03/10/2020	m_creech
clamp test.craft	34.7 KB	03/10/2020	m_creech
dcplr test.craft	35.4 KB	03/10/2020	m_creech
dcplr test 2.craft	44.1 KB	03/10/2020	m_creech
dcplr test 2a.craft	44 KB	03/10/2020	m_creech