Kerbal Space Program - Bug #27176

Incorrect properties on parachutes placed in symmetry

01/29/2021 09:48 PM - AccidentalDisassembly

Status:	New	**Start date:**	01/29/2021
Severity:	Low	**% Done:**	0%
Assignee:			
Category:	Editor		
Target version:			
Version:	1.11.1	**Language:**	English (US)
Platform:	Windows	**Mod Related:**	No
Expansion:	Breaking Ground, Core Game, Making History		

Description

When switching to the flight scene from the editor OR when picking up and re-placing a parachute part placed in symmetry, properties on both the 'parent' part and the 'child' part (the one created by symmetry) change; the properties of the 'child' part become significantly different from the parent.

To reproduce, it is helpful to have a mod such as StageRecovery installed (simply because it shows stats related to parachutes' effectiveness before actually using the chutes in flight, i.e. the mod calculates descent speed when the chutes are deployed), but the bug is NOT related to this mod and occurs in stock as well.

Steps:
1. In editor, build a rocket with any sort of part attached to the central core via symmetry - I tried 2x symmetry. Place a parachute on to that part (also using symmetry) - I found it helpful to place the parachutes at some distance from the craft's center of mass to make the effect more visible when testing in flight.

2. With no other changes to the craft and while still in the editor, the 'parent' parachute (placed by the mouse cursor) and the 'child' parachute (populated via symmetry) will appear to have the same stats/the same effect on the craft.

3. Now: Pick up the 'parent' parachute with the mouse, then place it back where it was. After this step, the stats of BOTH the parent and child parachute change. The parent chute becomes slightly less effective (meaning it slows the craft less) and the child parachute becomes significantly more effective (greater drag/slows the craft more than it should). This change can be made apparent via StageRecovery's calculations, but the exact same effect occurs in stock (and can be made apparent by testing in the flight scene). The numbers and calculations visualized by StageRecovery are not erroneous, in other words; they are reflecting something that's really happening to the part EITHER when picked up and re-placed OR when loading into the flight scene.

4. The difference in stats persists in the flight scene, AND/OR can be created simply by loading the craft in the flight scene. Launch the rocket, gain a little altitude, activate the symmetrical parachutes: The 'child' parachute created by symmetry will have significantly more of a slowing effect on the craft, which will tilt downward in the direction of the 'parent' chute as a result.

Summary: The stats of parachutes placed in symmetry diverge when picking up and re-placing a parachute in symmetry in the editor AND/OR when loading into the flight scene (launching a craft).