

Kerbal Space Program - Bug #13489

Adding more than 2 Kickback boosters does not produce additional thrust

12/24/2016 09:17 AM - theriekman

Status:	Not a Bug	Start date:	12/24/2016
Severity:	Normal	% Done:	0%
Assignee:			
Category:	Physics		
Target version:			
Version:	1.2.2	Language:	English (US)
Platform:	Windows	Mod Related:	No
Expansion:			

Description

After building a launch vehicle (without boosters) I figured that I would need additional Kickback boosters for my required dv. After adding only 2 Kickback booster I had a reasonable amount of lift-off thrust. However, I felt I was cutting it fine on the dv and decided to add 2 additional Kickback boosters (now 4 in total) to my launch vehicle. I kept all thrust limits for all parts exactly the same and, on paper, this vehicle should have more than enough thrust-to-weight ratio and dv for my needs. However, the lift-off thrust was way WORSE than the 2x Kickback booster-only vehicle. Either I am horrible with calculations, or extra boosters breaks gravity/thrust.

I've attached the craft files for both the 2x Booster and 4x Booster version where the rest of the vehicle was identical for both files.

History

#1 - 06/24/2017 11:29 PM - bewing

- Status changed from New to Not a Bug

- % Done changed from 0 to 100

The thrust from your extra two kickbacks is being obstructed by the engines for your twin boar. This cancels their thrust. So you are lifting the mass of the extra two kickbacks with no extra thrust.

You need to place your kickbacks so that their thrust is not obstructed by parts below them.

Files

Duna Satellites #2.craft	83.6 KB	12/24/2016	theriekman
Duna Satellites #4.craft	97.3 KB	12/24/2016	theriekman