Kerbal Space Program - Bug #27074

Thrust limiting is affecting Deltav of a craft with multiple engines that are the same when it shouldnt.

01/18/2021 12:24 AM - Anth12

Status:	New	**Start date:**	01/18/2021
Severity:	Low	**% Done:**	0%
Assignee:			
Category:	Gameplay		
Target version:			
Version:	1.11.0	**Language:**	English (US)
Platform:	Windows	**Mod Related:**	No
Expansion:	Breaking Ground, Core Game, Making History		

Description

GOG KSP 1.11.0 + DLCs (no mods)

ISP is not affected when the engines are the same, therefore thrust limiting shouldn't change deltav

How to replicate:
1. Load 'ThrustLimiter Tester.craft'
2. Set deltav to vacuum
3. Note deltav being 6068
4. Set thrustlimiter of one Skiff to 30 (it will automatically change the other)
5. Note deltav has changed to 5782

I recorded the values going from 100 - 1 and put it on a graph.

If its inaccurate for two engines that are the same, could this be worse for multiple engines that are different?

NOTE:
Some rocket configurations will do this more or less for some reason.
Double Precision did nothing to change this result. (Change Log 1.11.0* Amended dV and orbit calcs to use Double precision.)

Files

Untitled.png	18.9 KB	01/17/2021	Anth12
ThrustLimiter Tester.craft	15.9 KB	01/18/2021	Anth12
screenshot114.png	2.09 MB	01/18/2021	Anth12