

## Kerbal Space Program - Feedback #5208

### Jet engine fuel drain is wrong

07/04/2015 12:09 AM - Rahlubenru

<b>Status:</b>	Needs Clarification		
<b>Severity:</b>	Normal		
<b>Assignee:</b>			
<b>Category:</b>	Gameplay		
<b>Target version:</b>			
<b>Version:</b>	1.0.2	<b>Language:</b>	English (US)
<b>Platform:</b>	Any	<b>Mod Related:</b>	No
<b>Expansion:</b>			

#### Description

I would flag this as a bug but apparently it's a feature.

Jets are draining my liquid fuel from the wrong stage. I have an initial aircraft stage carrying a rocket plane stage underneath it, this rocket plane stage is further carrying a small rocket payload. The liquid fuel is being drained from the payload first, then the rocket stage, despite there being no fuel cross-feed between these stages. If I'd wanted these to drain I'd have put fuel lines in, the current system has no opt-out short of disabling all fuel drain from a tank. Re-enabling those tanks upon staging in flight is not practical.

Therefore there needs to be some way to designate to jets that you don't want fuel cross-feed since you're now using the no fuel cross-feed on decouplers to mean prioritise this fuel cross-feed for jets. Otherwise you essentially have no meaningful control over how jets drain fuel.

I am running the following mods but none should impact this issue:

Flight Manager for Reusable stages,  
Kerbal Positioning System, and  
Navball Docking Alignment Indicator

#### History

##### #1 - 07/04/2015 06:46 AM - Kasuha

Jet engines (similarly to RCS thrusters and ion engines) draw fuel in "staging priority". In practice that means that fuel tanks with most decouplers between them and the root of the ship get the highest priority and are emptied first.

Change root part of your ship to the payload and everything will work correctly.

The main problem is that the way how engines draw fuel is not always straightforward, poorly understood by players and not documented anywhere in the game.

##### #2 - 07/04/2015 07:51 AM - Rahlubenru

Changing the root part to be on the payload made no difference to the fuel drain on the craft attached to my original post.

##### #3 - 07/05/2015 09:46 AM - Kasuha

Okay, just changing root does not suffice (and maybe it should) but after I changed root to the command pod, then detached the rest of the plane by the first decoupler and attached it back, everything started working as intended.

My guess is that the scan for decouplers does not start at root part but starts at first part of the ship parts list.

##### #4 - 07/05/2015 12:24 PM - Rahlubenru

Thank you for the assistance there.

Though I still feel that my initial assessment stands, that the way this performs at the moment gives no meaningful control over what fuel jets can use and in what order at least this workaround will suffice for most cases. Any system with payloads in separate cargo bays would presumably fall foul of this once again since one could not set both payloads to be the root part.

Don't get me wrong, I like the idea of jets consuming fuel evenly across multiple tanks (otherwise I would have opted to revert to their old behaviour myself), I just feel that more control is needed over how these are grouped and/or in what order they drain. Honestly I don't know why bypassing the no fuel cross-feed parts was necessary for this change, I presume that there was a reason though.

**#5 - 07/06/2015 09:01 AM - Kasuha**

I agree with you that jet fuel drain rules are slightly more counterintuitive even than how rocket engines drain fuel - it is easy to run into problems and inexperienced users then get pressed to use mods that provide more freedom in fuel management. It is not documented anywhere and I spent considerable time figuring out how things work and validating my ideas about it. Some kind of simple solution to it would be nice, such as ability to "lock" payload: defining that whatever is behind selected decoupler or docking port is untouchable until decoupled or undocked.

**#6 - 07/17/2016 09:30 AM - TriggerAu**

- Status changed from New to Needs Clarification

**#7 - 02/07/2021 02:51 AM - kufikequ**

The words were barely out of her mouth before Jenny and I had fallen onto the bed and were in a lip lock while we pawed at each other. Matt lost interest in what was on TV because the performance in the bed next to him was much more appealing <https://1080ppornlist.com>. His eyes widened when her t-shirt came over her head and was tossed to the floor. He watched intently while she literally ripped the buttons on my shirt off and peeled it off my shoulders, revealing my toned abs and chest. He stared while she slid down my body and off the bed, tugging at my belt and zipper. I lifted off the bed so she could yank my pants and boxers down my legs and onto the floor <https://hotmyfreecams.com>. My python was free and pointing straight up to the sky.

**Files**

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Experimental Spaceplane Carrier C2.craft	172 KB	07/04/2015	Rahlubenru
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