

## Kerbal Space Program - Bug #6010

### Decoupling craft using docking port sometimes pulls incorrect parts with it

12/04/2015 06:44 PM - reinderien

<b>Status:</b>	Needs Clarification	<b>Start date:</b>	12/04/2015
<b>Severity:</b>	Low	<b>% Done:</b>	0%
<b>Assignee:</b>			
<b>Category:</b>	Gameplay		
<b>Target version:</b>			
<b>Version:</b>	1.0.5	<b>Language:</b>	English (US)
<b>Platform:</b>	Any	<b>Mod Related:</b>	No
<b>Expansion:</b>			

#### Description

This was confirmed by [sal\\_vager](#) in a [forum post](#)

This is reproducible, happening every time for the given craft. I have a space station with a small docking port, and when I carefully put a new station mast onto the dock, it seems to couple correctly. However, when I then decouple the tug that brought the mast, it is taking the mast's deployable radiator, and in two of three cases the deployable solar panel as well. These parts then float in front of the tug as if attached where they were when the mast was being carried.

I am running stock v1.0.5.1028 on a Windows 10 64-bit machine, though task manager says KSP is 32-bit. I installed via Steam.

All of the crafts in question (the station, tug and mast) are from the most recent version.

To quote Sal:

??Okay, there's a really simple workaround for this, just quicksave then quickload, done, the craft will now undock with no issue.

Turns out your station was the necessary factor to reproduce this as I can only reproduce it when docking to your station and undocking without save/loading beforehand.

When your tug+tower docks to your station KSP must be messing up the paths to some of the parts, so when you undock you take the solar panel and radiator with you.

When you save KSP sorts itself out, so when you reload the parts are parented correctly and they stay where they should.

This happens in memory, by the time it's written to the persistent.sfs or the quicksave.sfs the problem is gone, so all the parts have the right parents in the docked save.

So there's no checking of the save to see what went wrong, as by that time it's already fixed, there's also no errors written to the log so there's no help there.

Also, if I dock your tug+tower to anything else the issue doesn't occur.

On checking over your ship in more detail I notice that your small docking port is the root of the vessel, that may be a factor, if you had used the probe as the root it may have been different.

I'll keep hold of the saves, and it may be an idea to post this to the KSP bug tracker, as the only way to debug this properly would be for a dev to watch what happens when your craft dock in the Unity editor.

It's an odd issue, and hopefully it'll be rare as it doesn't occur with other docking targets as my earlier pic showed, and thankfully it's easy to avoid.

So no need to scrap the ship just yet, you could try using the re-root tool in the editor (press 4, click vessel, click new vessel root) and see if future dockings with this tug on your station have the same issue, but as the docking port is the root I suspect you'll be rebuilding this for the next delivery anyway??

#### History

#1 - 12/04/2015 06:52 PM - sal\_vager

- Status changed from New to Confirmed
- % Done changed from 0 to 10
- Platform Any added
- Platform deleted (Windows)

Yep, was able to see this happening on Linux as well.

## #2 - 12/29/2015 12:47 AM - Kasuha

I took a look at it.

The bug seems to be triggered by decoupling part of a ship that has just been docked to a station. Adding parts of the ship at the end of part list of the station may play a role here.

The small ship has 50 parts and parts 0 to 18, 48, and 49 are decoupled. The two panels sent along are index 32 and 44 in part list of the original ship. There's nothing in the structure of the ship (as saved, either undocked or even after docking) that would suggest why exactly these two parts are carried away.

All save files appear to be correct, regardless of in what phase of the process they are made.

If I dock, quicksave, quickload, then separate the tug, there are no problems. No extra parts carried away.

I also noticed that if I dock, separate the tug, watch it fly away with the extra parts for a short while, and **then** quicksave and quickload, everything returns to normal as well. The two panels being carried away by the tug are still part of the station.

Workaround: quicksave/quickload or return to space center before decoupling any parts of a docked ship.

## #3 - 07/17/2016 09:41 AM - TriggerAu

- Status changed from Confirmed to Needs Clarification
- % Done changed from 10 to 0

### Files

Base Zero Mast.craft	128 KB	12/04/2015	reinderien
Docked.sfs	862 KB	12/04/2015	reinderien
Bug Screenshot.png	1.23 MB	12/04/2015	reinderien
Post-docking.sfs	864 KB	12/04/2015	reinderien
Pre-docking.sfs	863 KB	12/04/2015	reinderien