

## Kerbal Space Program - Bug #5264

### NPE caused by connecting active vessel to non-active vessel klaw

07/24/2015 01:36 AM - Hecicube

<b>Status:</b>	Duplicate	<b>Start date:</b>	07/24/2015
<b>Severity:</b>	Normal	<b>% Done:</b>	100%
<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

Note: This was tested on a mod installation, but this uses parts available in stock and is very easy to re-create within 5 minutes. I also marked the platform as any as it should be platform independent, but I only personally tested it on windows.

#### Recreation steps:

1. Design a small rover (easiest) with a klaw on the front
2. Launch two of these rovers (going back to KSC is important, as it packs the vessel)
3. Reverse one rover into the klaw of the other rover

You should lose all GUI, and experience some physics weirdness. You also cannot switch vessels or move the camera.

#### Other important notes:

1. You do not need 2 klaws, there's only 2 involved for convenience sake.
2. Vessel unpacking plays an important role in this, without the packing and then unpacking the bug is not triggered.
3. Assuming you have a vessel you know got unpacked, you can re-create the bug 100% of the time.
4. Assuming you have a vessel you know wasn't unpacked (i.e. just made it), the bug will not occur when using a klaw on that vessel.

#### Related issues:

Related to Kerbal Space Program - Bug #3988: Advanced Grabbing Unit Loss of...	<b>Closed</b>	<b>01/25/2015</b>
Related to Kerbal Space Program - Bug #5211: Camera gets stuck when a craft (...)	<b>Duplicate</b>	<b>07/05/2015</b>
Related to Kerbal Space Program - Bug #5098: Docking with claw when claw-equi...	<b>Duplicate</b>	<b>06/01/2015</b>
Related to Kerbal Space Program - Bug #2753: New kraken: all ships accelerate...	<b>Closed</b>	<b>07/12/2014</b>
Is duplicate of Kerbal Space Program - Bug #2881: Controlling claw dockee thr...	<b>Closed</b>	<b>08/28/2014</b>

#### History

##### #1 - 07/24/2015 12:19 PM - Hecicube

After more testing, it seems to be even more obscure than I thought, it's possible to have 2 klaws connect to each other. When this occurs, the model for one klaw head will flip to match the other head (signalling which half has the root part). Upon releasing the klaw on the half that has the root part, the NPE occurs shortly after.

It also appears that my initial speculation about vessel unpacking is incorrect, and was a fluke during testing despite repeating the test 3 times in both scenarios. However, there's still some other criteria required to trigger the bug, which may involve if KSP classifies a vessel as persistent or not.

I recorded my testing this time, so that might help in finding the exact cause. I'll have that uploaded soon.

##### #2 - 07/24/2015 01:57 PM - Hecicube

Video showing tests I did: <https://dl.dropboxusercontent.com/u/13281778/test.mp4> (~72MB)

Sorry for potato quality and unedited footage, original file size was 5GB and I didn't have an editor that would take uncompressed flv files.

Also, I forgot to give the relevant NPEs:

```
[EXC 14:29:05.871] NullReferenceException
UnityEngine.Component.get_transform ()
OrbitPhysicsManager.LateUpdate ()
[EXC 14:29:05.879] NullReferenceException
UnityEngine.Component.get_transform ()
VesselLabels.DrawGUI ()
RenderingManager.OnGUI ()
```

In both cases the NPE occurs internally, suggesting that claw attachment code causes something to be unset rather than the issue being with that code directly.

**#3 - 07/25/2015 12:24 AM - Squelch**

- Is duplicate of Bug #2881: Controlling claw dockee throws NullPointerException, hell kraken arises added

**#4 - 07/25/2015 12:24 AM - Squelch**

- Related to Bug #3988: Advanced Grabbing Unit Loss of reference to parent ship added

**#5 - 07/25/2015 12:26 AM - Squelch**

- Related to Bug #5211: Camera gets stuck when a craft (not being the current one) with a claw attaches to the active vessel added

**#6 - 07/25/2015 12:27 AM - Squelch**

- Related to Bug #5098: Docking with claw when claw-equipped ship not focused breaks physics added

**#7 - 07/25/2015 12:27 AM - Squelch**

- Related to Bug #2753: New kraken: all ships accelerate randomly and are uncontrollable when time warp is engaged added

**#8 - 07/25/2015 12:28 AM - Squelch**

This seems very similar if not a duplicate of [#2881](#).

There are a number of reports concerning physics glitches, and other odd behaviour that surround the use of the claw. Thank you for your comprehensive report, it will be added to the case file on this. Please see the related issues.

**#9 - 07/25/2015 12:29 AM - Squelch**

- Status changed from New to Duplicate

- % Done changed from 0 to 100