

# Kerbal Space Program - Bug #18664

## Part and ship price irregularities

04/24/2018 05:24 AM - jclovis3

<b>Status:</b>	Confirmed	<b>Start date:</b>	04/24/2018
<b>Severity:</b>	Low	<b>% Done:</b>	10%
<b>Assignee:</b>			
<b>Category:</b>	Gameplay		
<b>Target version:</b>			
<b>Version:</b>	1.4.2	<b>Language:</b>	English (US)
<b>Platform:</b>	Windows	<b>Mod Related:</b>	No
<b>Expansion:</b>	Core Game, Making History		

### Description

All parts available in Core Game and Making History have a cost ending in ".00" (as of 1.4.2 anyway) and the funds shown on screen are rounded off to the whole number, making it seem unnecessary to display the two digit decimal of cents for a part cost.

When you launch a ship from the launch pad directly, the ship list shows only a single digit past the decimal on ship parts, which is inconsistent with part costs as reported in the VAB showing two digits.

The only way I can see having a fraction of a monetary unit (for lack of a proper name, I'll call them 'Kerbucks') is with the use of parts like protective shells where you can build their geometry to fit your needs, but here is where the bug lies...

In the screen shot called "Base Cost 4000", I start with an RC-L01 Remote Guidance Unit which costs "3,400.00" Kerbucks and a AE-FF2 Airstream Protective Shell (2.5m) which costs "600.00" Kerbucks for a total ship cost of "4000" Kerbucks.

In the screen shot called "Cost of fairing doesn't match change in ship cost" note the fairing being built hasn't been closed off yet but the cost estimate is identified as "680.68" Kerbucks. Also note that the ship cost is updated on the fly while editing this fairing, and the reported costs at this moment reads "4,454" which implies that your fairing will really only cost you 454 Kerbucks.

Image "Cost of ship now reduced to much lower value" shows the final ship cost after capping the fairing off at this point, which is reduced to "4,087" Kerbucks so that 680.68 Kerbuck fairing was just discounted to 87 Kerbucks. Assuming that the fairing price includes the 600 for the base unit, this would make sense since 80.68 would be rounded off in the final price to 81 Kerbucks, but wait, why is it 87 Kerbucks then? Why did the report say the total would be "4,454"? Lots of questions here point to numerous causes of bugs in this area.

### Summary of bugs:

1. Inconsistent use of decimal places in monetary reports.
2. Incorrect results from math functions as a result of adding new customizable parts.

### History

#### #1 - 04/25/2018 02:30 PM - Nachbar

I have a feeling this is related to the other fairing bugs because even though the fairing is shown on your rocket it essentially does nothing and I bet when they fix those bugs this one will be fixed too.

#### #2 - 04/27/2018 06:03 AM - Nachbar

The price estimate is a lot more accurate now with the 1.4.3 patch. The price is only off by about 20 bucks when I build a fairing now. (I built a 1200 dollar fairing). Now the number in the bottom left while you build the fairing will show random cost amounts but the overall cost for a fairing in the text in the middle is correct. Remember that number is the cost for the entire fairing including the base so detach the fairing and reattach it to check if the numbers line up.

#### #3 - 04/27/2018 07:09 AM - jclovis3

- Status changed from New to Confirmed

- % Done changed from 0 to 10

I think there is a tiny cost for the closing tip. I just started with a \$600 pod, and the \$1,200 base unit for a Protective Shell. Then brought the fairing up to within a buck from \$2000 (was like \$1,999.47) and closed it. The end cost was \$2,608, so the whole protective shell was \$2,008 after capping it.

A shell with base and fairing cost estimated at \$12,000 ended up costing an extra \$16 to cap. The diameter of your last stage before capping will

determine how much is needed for the cone tip.

The only problem I still see is that with each stage of the fairing you build, the grey number estimate in the corner gets updated but this value is above what it should be. By the time you cap it, this number drops suddenly. In order for this to be fixed, that grey number should be updated either as you move the mouse around to shape the fairing, reflecting the previous parts, plus the protective shell base and fairings, or it should not change until you either close the fairing or cancel changes. I think it's getting a value from the base cost of the protective shell which is tacked on before you build the fairing and then the estimated fairing cost including the base, thus double dipping on the base cost during the estimate. With each segment you add, it seems to be adding all the previous segments over and over again.

## Files

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Ship list from Launch Pad.png	588 KB	04/24/2018	jclovis3
Base Cost 4000.png	1.54 MB	04/24/2018	jclovis3
Cost of fairing doesn't match change in ship cost.png	1.55 MB	04/24/2018	jclovis3
Cost of ship now reduced to much lower value.png	1.56 MB	04/24/2018	jclovis3