Kerbal Space Program - Bug #13403

radiators used on asteroids do not work

12/10/2016 01:18 PM - LatiMacciato

Status:	Ready to Test	**Start date:**	12/10/2016
Severity:	Normal	**% Done:**	80%
Assignee:			
Category:	Parts		
Target version:	1.12.0		
Version:	1.2.2	**Language:**	English (US)
Platform:	Linux	**Mod Related:**	No
Expansion:			

Description

KSP Version:
1.2.2.1622 (Linux/Ubuntu 16.04-64bit)

What Happens:
radiators in space do not cool drills attached to asteroids

Mods / Add-Ons:
stock, but I used hyperedit to manipulate an asteroid and the craft

Steps to Replicate:
1) try mining on an asteroid

Result:
the drills will overheat

Other Notes/Pictures/Log Files:
- see attachment file
- I will provide more info if necessary

History

#2 - 12/10/2016 08:32 PM - AlffromKerbal

- File AsteroidMining.sfs.zip added

- Status changed from New to Confirmed

- % Done changed from 0 to 10

I currently have the same experience in careermode. Just wondered why cooling isn't enough. Radiator cooling % are rising slightly, also glowing some time, but "small" drill's temperature rises up fast, stay at 780.40K and shuts down when unfocusing & refocusing, or timeacceleration >100x.

#3 - 12/19/2016 05:18 PM - sal_vager

Hi LatiMacciato, AfroKerbal, can you please try editing this line in GameData/Squad/Parts/Resources/RadialDrill and GameData/Squad/Parts/Resources/MiniDrill

```
UseSpecialistBonus = true
```

To this

```
UseSpecialistBonus = false
```

And let me know if it works after that.

Thank you.

#4 - 12/19/2016 05:43 PM - LatiMacciato

~~The drills are still stuck at about 818.76K of max 500K temp, even with the change.~~

EDIT: i have edited in the wrong section :P

#5 - 12/19/2016 08:47 PM - AlffromKerbal

There are 2 entries per modul (planet & asteroid). Since RadialDrill is working on planet, i didn't check MiniDrill on planet.

I checked MiniDrill & RadialDrill in modul for asteroid mining. After changing the value to ***UseSpecialistBonus = false*** after entry *TemperatureModifier{...}***only** fixed it already. Changing the one after *ImpactTransform* only didn't do it. Changing both is working too.

Btw., interesting expression *AfroKerbal* ... is that a leak for a future release feature? ;)

#6 - 12/19/2016 09:23 PM - LatiMacciato

- File RadialDrill.cfg added

- File MiniDrill.cfg added

yeah, I noticed 2x UseSpecialistBonus, too.
you guys might wanna sort that :D

I attached my cfg's, hope this works out somehow! .. it works for me having just 1x this variable set to false :)

#7 - 12/19/2016 10:28 PM - AlffromKerbal

> it works for me having just 1x this variable set to false

Thought i worked this out and already told that, but english is not my mother tounge.

#8 - 02/05/2017 07:46 AM - achurch

I ran into the same problem (also Linux 1.2.2.1622), but the solution of setting UseSpecialistBonus to false doesn't work for me: it does stop the drills from overheating, but then the ISRU in the same craft starts to overheat. I should have sufficient cooling for all three: 6x small TCS = 300kW, ISRU (1 channel active) + 2x MiniDrill = 300kW.

The solution I found that more-or-less works is to set radiatorCoolingFactor = 100 in the CoreHeatModule section of MiniDrill.cfg. This causes the drills' core temperature to rapidly fluctuate in the 470-500 degree range, but neither the drills nor the ISRU overheat.

#9 - 02/05/2017 12:06 PM - AlffromKerbal

The small ISRU is designed to overheat in generell, its max cooling is below needed cooling.

See there: #13270

If you use an ISRU 250, your radiators aren't attached on the ISRU unit but on a part attached to it, which means lower effeciency/heat-transfer (as far i understand).

#10 - 02/05/2017 06:46 PM - achurch

This is the large ISRU, and according to KSPedia active radiators (TCS) cool all parts on the ship equally, at least as I read it.

#11 - 02/06/2017 02:51 AM - rspeed

It appears that ModuleResourceConverter is affected by the same bug. I had to make the same edits to ISRU.cfg to prevent it from overheating. What's odd is that UseSpecialistBonus was already set to false for LF+OX and Monoprop converters. That probably explains why achurch and I saw the issue while others did not.

#12 - 02/07/2017 07:52 PM - UltraSqueak

- File MiniDrill.cfg added

- File RadialDrill.cfg added

AlffromKerbal wrote:

> I currently have the same experience in careermode. Just wondered why cooling isn't enough. Radiator cooling % are rising slightly, also glowing some time, but "small" drill's temperature rises up fast, stay at 780.40K and shuts down when unfocusing & refocusing, or timeacceleration >100x.

I'm having the exact same issue (same version, vanilla, but Windows). Tried changing the config files as described above, but no effect.

I have another drill running on a different asteroid with fewer radiators, and have not run into this problem. Main difference is the one that's running

smoothly has an Engineer on board and the one that's overheating is unmanned.

Is there something I'm missing or maybe this bug is different on the Windows version?

#13 - 02/07/2017 11:20 PM - AlffromKerbal

- File MiniDrill.cfg added

- File RadialDrill.cfg added

I think you changed the wrong values, try to use mine and retest.

If those won't work aswell, it's up to **sal_vager** to point the problem out. Maybe it's not reduced to the cfg file but to something inside the program itself.

#14 - 02/08/2017 08:12 AM - UltraSqueak

Thanks AlffromKerbal, but still no effect. Drill temp rises swiftly to 780.40K and 5% thermal efficiency. The 4 small thermal control systems only get to around 16% cooling, and the 4 small radiators (one part away) get to around 15% cooling.

Hope there is a fix for this as the asteroid is on an escape trajectory and I won't be able to slow it down otherwise.

#15 - 02/20/2017 10:23 AM - rudi1291

Have that problem in my current career game too. Drill temperatures rise until they overheat... But for some reason the radiators work fine for everything else. The ISRU and engines are cooled as expected

#16 - 03/23/2017 10:35 PM - gringo

I have it in career mode, too (Windows x64 1.2.2.1622 build (GOG)). Even on Minmus the cooling on drills and ISRUs doesn't work and temperature eventually sticks at 708K. On Kerbin it works perfectly well, but nowhere else. It occured first on a modded game, but after clean install and unmodded it was still present. Changing the the UseSpecialistBonus line(s) to false didn't work either.

#17 - 04/07/2017 12:39 AM - Amechwarrior

I had the same problem in my game- win10, x64, steam, w/mods- but just gfx and QOL, no parts or game tweaks. Changing the last "UseSpecialistBonus = true" to "false" in the RadialDrill.cfg solved the problem for my unmanned asteroid grabber. Hope this little fix makes it in to the next update.

#18 - 04/07/2017 07:01 AM - bewing

Well, the fix (along with many other fixes) is in the current prerelease, so upgrade already. :)

#19 - 05/11/2017 06:54 PM - Fonz

- File Screen Shot 2017-05-11 at 2.52.34 PM.png added

bewing wrote:

> Well, the fix (along with many other fixes) is in the current prerelease, so upgrade already. :)

Hi Bewing, I'm using 1.2.2.1622 (OSXPlayer) and this bug is still present, is it perhaps a mac specific bug?

#20 - 05/12/2017 06:27 PM - rspeed

Fonz wrote:

> 1.2.2.1622

The prerelease is version 1.2.9. Installing it requires changing the game's properties in Steam.

#21 - 09/30/2017 08:02 PM - rspeed

This needs to be updated as it was fixed in 1.3.

#22 - 06/24/2021 11:04 PM - victorr

- Status changed from Confirmed to Ready to Test

- Target version set to 1.12.0

- % Done changed from 10 to 80

We have made some changes in this last 1.12.0 release and would like some feedback on this issue. Thanks.

Files

persistent.sfs	49 KB	12/10/2016	LatiMacciato
AsteroidMining.sfs.zip	583 KB	12/10/2016	AlffromKerbal
RadialDrill.cfg	3.97 KB	12/19/2016	LatiMacciato
MiniDrill.cfg	4.15 KB	12/19/2016	LatiMacciato
MiniDrill.cfg	4.28 KB	02/07/2017	UltraSqueak
RadialDrill.cfg	4.09 KB	02/07/2017	UltraSqueak
MiniDrill.cfg	4.13 KB	02/07/2017	AlffromKerbal
RadialDrill.cfg	3.95 KB	02/07/2017	AlffromKerbal
Screen Shot 2017-05-11 at 2.52.34 PM.png	1.72 MB	05/11/2017	Fonz