



Łukasz Czerwiński <czerwinski lukasz1@gmail.com>

Case 00022669 Serious problem with Phantom Premium device [ref:_00D709NWI._50070UuUr9:ref]

10 wiadomości

SensAble Support <sensablesupport@geomagic.com>
Do: "czerwinski lukasz1@gmail.com" <czerwinski lukasz1@gmail.com>

15 lipca 2013 18:07

Dear Łukasz,

It sounds that z axis capstan or something else is loose. The problem is that when the z motor spins, the drive cable doesn't drive the Phantom arm to move as well. There is a set screw in the z axis capstan (see attached picture). Try tightening the screw.

If you'd like to send the device back for repair, please fill out our online RMA request form here:

<http://support.sensable.com/support-request-rma.htm>

Please feel free to contact me if you have any questions, ok?

Best Regards,
Mei

Mei Lu | **Senior Technical Support Engineer, Geomagic® Solutions**
3DSYSTEMS | NYSE: DDD | WWW.3DSYSTEMS.COM
181 Ballardvale Street | Wilmington, MA 01887 | **USA**
Tel: +1 781 939 7444 | Toll free: +1 888 736 7225(within US only)
| Email: sensablesupport@geomagic.com | Web: www.geomagic.com |
Support: <http://support.sensable.com/>



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Phantom type: Premium 1.5 High Force (6DOF).

Looking forward to your reply and tips, what could have broken and how to fix it.

Greetings from Poland,
?ukasz Czerwi?ski

ref:_00D709NWl._50070UuUr9:ref



SetScrew.jpg
244K

Hi ?ukasz,

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Mei

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From: SensAble Support [sensablesupport@geomagic.com]

Sent: 7/15/2013 12:07 PM

To: czerwinski lukasz1@gmail.com

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Do: SensAble Support <sensablesupport@geomagic.com>

15 lipca 2013 22:25

Hello, Mei. Thank you so much for that tip - it will probably help!

Yes, you are right - the set-screw on one of those two capstans is loose. I didn't notice that before and thought it's something bad with the motor inside. Phew! I hope that will resolve my problems. But unfortunately I don't know (yet) two things:

1) (easier?) How to tighten this screw? It looks like having a round hole in it, but probably it's a tiny hexagon like this: http://en.wikipedia.org/wiki/File:Grub_Screw.svg, isn't it? So I need such a tiny hex key here. I hope I find such in shops. Do you know it's diameter or size?

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15 lipca 2013 22:46

Hi Łukasz,

I emailed our manufacturing for help :) In the meantime, could you please check if there's an allen wrench (

see attached picture) in your Phantom accessories.

Have a good night!

Mei

----- Original Message -----

From: ?ukasz Czerwi?ski [czerwinskiukasz1@gmail.com]

Sent: 7/15/2013 4:26 PM

To: sensablesupport@geomagic.com

Subject: Re: Case 00022669 Serious problem with Phantom Premium device [ref:_00D709NWI._50070UuUr9:ref]

Hello, Mei. Thank you so much for that tip - it will probably help!

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AllenWrench.jpg
1395K

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1.5 motor.jpg
1575K

Hello, Mei.

Thank you. The picture doesn't help much - the motor shaft **is** flat on one side, see red circles in the image attached. The same I can see in my Phantom - one side is flat. In all cases the screw is placed over this area. I'm sure I'm right :) Could you please make sure once again about shafts? There still remains the question how to tighten the screw to the flat side of the shaft.

Best wishes,
Łukasz Czerwiński

2013/7/16 SensAble Support <sensablesupport@geomagic.com>

Hi Lukasz,

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1. You will need a .090 allen wrench to tighten the capstan.
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> From: SensAble Support [sensablesupport@geomagic.com]

> Sent: 7/15/2013 12:07 PM

> To: czzerwinskiukasz1@gmail.com

> Subject: Case 00022669 Serious problem with Phantom Premium device [
> ref:_00D709NWI._50070UuUr9:ref]

>

> Dear Łukasz,

>

> It sounds that z axis capstan or something else is loose. The problem is
> that when the z motor spins, the drive cable doesn't drive the Phantom arm
> to move as well. There is a set screw in the z axis capstan (see attached
> picture). Try tightening the screw.

> If you'd like to send the device back for repair, please fill out our
> online RMA request form here:

> <http://support.sensable.com/support-request-rma.htm>

> Please feel free to contact me if you have any questions, ok?

>

> Best Regards,

> Mei

>

> Mei Lu | Senior Technical Support Engineer, Geomagic® Solutions

> 3DSYSTEMS | NYSE: DDD | WWW.3DSYSTEMS.COM

> 181 Ballardvale Street | Wilmington, MA 01887 | USA

> Tel: +1 781 939 7444 | Toll free: +1 888 736 7225(within US only)

> | Email: sensablesupport@geomagic.com | Web: www.geomagic.com | Support:

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> ref:_00D709NWI._50070UuUr9:ref

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SetScrew - with flat shaft.JPG

181K

SensAble Support <sensablesupport@geomagic.com>
Do: "czerwinski lukasz1@gmail.com" <czerwinski lukasz1@gmail.com>

17 lipca 2013 16:28

Hi Lukasz,

It sounds that your Phantom is indeed a high force model. We'll need to remove the drive cable to put the capstan in the right location. To be safe, it's better to send the device back for repair. If you'd like to do that, please fill out our online RMA request form at:

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Sent: 7/17/2013 7:56 AM

To: sensablesupport@geomagic.com

Subject: Re: Case 00022669 Serious problem with Phantom Premium device [ref:_00D709NWI._50070UuUr9:ref]

Hello, Mei.

Thank you. The picture doesn't help much - the motor shaft *is* flat on one side, see red circles in the image attached. The same I can see in my Phantom - one side is flat. In all cases the screw is placed over this area. I'm sure I'm right :) Could you please make sure once again about shafts?

There still remains the question how to tighten the screw to the flat side of the shaft.

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Łukasz Czerwiński <czerwinski lukasz1@gmail.com>
Do: Bartosz Borucki <babor@icm.edu.pl>

18 lipca 2013 12:33

Do pośmiania się :)

Łukasz

----- Forwarded message -----

From: **SensAble Support** <sensablesupport@geomagic.com>
Date: 2013/7/17
Subject: Re: Case 00022669 Serious problem with Phantom Premium device [ref:_00D709NWI._50070UuUr9:ref]
To: "czerwinski lukasz1@gmail.com" <czerwinski lukasz1@gmail.com>

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Best Regards,

Mei

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2013/7/16 SensAble Support <sensablesupport@geomagic.com>

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Łukasz Czerwiński <czerwinski lukasz1@gmail.com>
Do: SensAble Support <sensablesupport@geomagic.com>

18 lipca 2013 13:02

Thank you for your proposal. I managed to rotate the shaft yesterday to the proper position without the need of removing anything - just first of all I moved the capstan as if was trying to remove it (without removing a steel cable placed on it) and then I could grab the shaft with a tool like this <http://www.gimmik.pl/szczypce-waskie-dlugie-150-mm-77042-p-6477.html>. Then, while holding capstan by hand, I rotated the shaft. Next, moved capstan back to the normal position and carefully tightened the screw. It seems that so far everything works correctly.

Thanks for all your help, honestly, it was on a great level - both fast and helpful.

Have a nice day :)
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> > Please feel free to contact me if you have any questions, ok?
> >
> > Best Regards,
> > Mei
> >
> > _____
> > Mei Lu | Senior Technical Support Engineer, Geomagic® Solutions
> > 3DSYSTEMS | NYSE: DDD | WWW.3DSYSTEMS.COM
> > 181 Ballardvale Street | Wilmington, MA 01887 | USA
> > Tel: +1 781 939 7444 | Toll free: +1 888 736 7225(within US only)
> > | Email: sensablesupport@geomagic.com | Web: www.geomagic.com | Support:
> > <http://support.sensable.com/>
> >
> >
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> > Greetings from Poland,
> >
> > ?ukasz Czerwi?ski
> >
> > ref:_00D709NWl._50070UuUr9:ref
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SensAble Support <sensablesupport@geomagic.com>
Do: "czerwinski lukasz1@gmail.com" <czerwinski lukasz1@gmail.com>

18 lipca 2013 17:47

Smart! :) Thanks for the updates! I'm very happy to hear the wonderful news.

If you don't hear from me tomorrow, you have a great weekend!

Mei

----- Original Message -----

From: ?ukasz Czerwi?ski [czerwinski lukasz1@gmail.com]
Sent: 7/18/2013 10:36 AM
To: sensablesupport@geomagic.com
Subject: Re: Case 00022669 Serious problem with Phantom Premium device [ref:_00D709NWI._50070UuUr9:ref]

Thank you for your proposal. I managed to rotate the shaft yesterday to the proper position without the need of removing anything - just first of all I moved the capstan as if was trying to remove it (without removing a steel cable placed on it) and then I could grab the shaft with a tool like this <http://www.gimmik.pl/szczypce-waskie-dlugie-150-mm-77042-p-6477.html>. Then, while holding capstan by hand, I rotated the shaft. Next, moved capstan back to the normal position and carefully tightened the screw. It seems that so far everything works correctly.

Thanks for all your help, honestly, it was on a great level - both fast and helpful.

Have a nice day :)
?ukasz Czerwi?ski

2013/7/17 SensAble Support <sensablesupport@geomagic.com>

> Hi Lukasz,
>
> It sounds that your Phantom is indeed a high force model. We'll need to
> remove the drive cable to put the capstan in the right location. To be
> safe, it's better to send the device back for repair. If you'd like to do
> that, please fill out our online RMA request form at:
>
> <http://support.sensable.com/support-request-rma.htm>
>
> Please feel free to contact me if you have any further questions, ok?
>
> Best Regards,
>
> Mei

> ----- Original Message -----

> From: ?ukasz Czerwi?ski [czerwinski lukasz1@gmail.com]
> Sent: 7/17/2013 7:56 AM
> To: sensablesupport@geomagic.com
> Subject: Re: Case 00022669 Serious problem with Phantom Premium device [ref:_00D709NWI._50070UuUr9:ref]
>
> Hello, Mei.
>
> Thank you. The picture doesn't help much - the motor shaft *is* flat on one

> side, see red circles in the image attached. The same I can see in my
> Phantom - one side is flat. In all cases the screw is placed over this
> area. I'm sure I'm right :) Could you please make sure once again about
> shafts?
> There still remains the question how to tighten the screw to the flat side
> of the shaft.

>
> Best wishes,
> Łukasz Czerwiński

>
>
>
>
> 2013/7/16 SensAble Support <sensablesupport@geomagic.com>
>

> > Hi Lukasz,
> >
> > I got answers from our manufacturing:
> >
> > 1. You will need a .090 allen wrench to tighten the capstan.
> > 2. The motor shaft is not flat. I've attached a picture to show you how
> > it
> > looks like.
> >
> > Hope this helps :)
> >
> > Best Regards,
> >
> > Mei

> >
> > ----- Original Message -----
> > From: Łukasz Czerwiński [czerwinski lukasz1@gmail.com]
> > Sent: 7/15/2013 4:26 PM
> > To: sensablesupport@geomagic.com
> > Subject: Re: Case 00022669 Serious problem with Phantom Premium device [
> > ref:_00D709NWI._50070UuUr9:ref]
> >

> > Hello, Mei. Thank you so much for that tip - it will probably help!
> > Yes, you are right - the set-screw on one of those two capstans is
> > loose. I
> > didn't notice that before and thought it's something bad with the motor
> > inside. Phew! I hope that will resolve my problems. But unfortunately I
> > don't know (yet) two things:

> >
> > 1) (easier?) How to tighten this screw? It looks like having a round hole
> > in it, but probably it's a tiny hexagon like this:
> > http://en.wikipedia.org/wiki/File:Grub_Screw.svg, isn't it? So I need
> > such
> > a tiny hex key here. I hope I find such in shops. Do you know it's
> > diameter
> > or size?

> >
> > 2) (harder?) The axle on which a capstans are rotating aren't round, but
> > flat on one side. As I can see in the picture and on the second capstan,
> > firmly placed in my Phantom, the screw must be placed directly over that
> > flat area. Unfortunately because the axle is rotating when applying force
> > and the capstan is not, the screw is in a different position. I tried to
> > apply some force using slider in Test application to make the axle to be
> > placed properly, but it's impossible to move the axle precisely, so I
> > never
> > succeeded in placing it properly. Do you have any idea how to do that? I'm

> > sorry if it's an easy task. I will try to invent another clever way, but
> > now it's 10:20 p.m. here, so it's time to get out of work.
> >
> > Have a good day,
> > ?ukasz Czerwi?ski
> >
> >
> >
> >
> > 2013/7/15 SensAble Support <sensablesupport@geomagic.com>
> >
> > > Hi ?ukasz,
> > >
> > > Forgot to mention, could you please double check if your Phantom
> > Premium
> > > device is a 1.5 6DOF model or a 1.5 High Force 6DOF model? Take a look
> > at
> > > the label on the back of the device. If you are not sure, could you
> > please
> > > provide the Phantom serial number and a picture of the device?
> > >
> > > Thanks!
> > >
> > > Mei
> > >
> > > ----- Original Message -----
> > > From: SensAble Support [sensablesupport@geomagic.com]
> > > Sent: 7/15/2013 12:07 PM
> > > To: czerwinskiukasz1@gmail.com
> > > Subject: Case 00022669 Serious problem with Phantom Premium device [
> > > ref:_00D709NWI._50070UuUr9:ref]
> > >
> > > Dear ?ukasz,
> > >
> > > It sounds that z axis capstan or something else is loose. The problem
> > is
> > > that when the z motor spins, the drive cable doesn't drive the Phantom
> > arm
> > > to move as well. There is a set screw in the z axis capstan (see
> > attached
> > > picture). Try tightening the screw.
> > > If you'd like to send the device back for repair, please fill out our
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