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Advice on adjusting yoke on TV pic tube

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Alan
Guest
Posts: n/a

02-26-2004, 10:28 PM

With letterbox video, you can see that the picture on my couple years old Sony 32" is rotated slightly from the horizontal (the picture itself is a correct rectangle). There is no adjustment that will fix this in the service menu. I got a TV repair book out of the library, and it looks like all I have to do to correct it is to loosen the deflection yoke clamp and rotate the yoke slightly. Shouldn't be a problem, I'm an accomplished home appliance fix it yourselfer. But I read that the picture tube can hold a high voltage charge for several days (as well as that there's all sorts of high voltage stuff in TVs anyway).

My question is, is it dangerous to touch to tube itself as opposed to the electrical terminals on it? I'm not intending to touch any electrical contact points, or do anything with the electronics, just loosen the yoke and turn it a little, but I thought I should check with Those Who Know in the forum.

Thanks

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www.mouser.com

john
Guest
Posts: **n/a**

02-26-2004, 11:06 PM

You want the Truth..
Leave it alone you will effect
the overall convergence.

kip

--

"Watch the return E-Mail addy its false"

"Alan" <(E-Mail Removed)> wrote in message

news:(E-Mail Removed) om...

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Iriss

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David
Guest
Posts: n/a

02-26-2004, 11:37 PM

Don't Do It.

Any movement of the yoke will effect geometry, convergence, and purity. Unless you are equipped and have all the training and equipment required to perform all those adjustments after screwing with the yoke, do not touch it.

Depending on how far it is rotated, the Earth's magnetic field will cause rotation. On a 27" size tube it can be as much as 1" variance from left to right depending on where you live, in the US, and the direction the tv set is facing.

This is why many of the 'better' higher end and larger tv sets include in the USER menu or a set of switches on the back a tilt correction circuit.

David

"Alan" <(E-Mail Removed)> wrote in message
news:(E-Mail Removed) om...

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James Sweet
Guest
Posts: n/a

02-27-2004, 12:45 AM

"Alan" <(E-Mail Removed)> wrote in message
news:(E-Mail Removed) om...
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I wouldn't worry too much about getting shocked, just don't touch exposed connections. What I would worry about is messing up the convergence and other settings, I adjust yokes frequently on old arcade game monitors, you just fire up the monitor, put a test pattern on the screen, loosen the clamp and rotate the yoke until it's straight then clamp it down, but these are generally basic 19" shadow mask tubes, I'd be hesitant to mess with a big Trinitron unless it's really bad.



Patch
Guest
Posts: n/a

02-27-2004, 03:53 PM

"Alan" <(E-Mail Removed)> wrote in message
news:(E-Mail Removed) om...
> With letterbox video, you can see that the picture on my couple years
> old Sony 32" is rotated slightly from the horizontal (the picture
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> with Those Who Know in the forum.
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> Thanks

Don't mess with the yoke, put a couple of shims under the low side. LOL



techforce
Guest
Posts: n/a

02-27-2004, 07:10 PM

Actually, that's probably the cause of the problem. The Earth's Magnetic Field probably shifted somewhat enough to only be reflective in this particular set.

According to Discovery channel, the Polarity of the Earth's Magnetic Field has Reversed at least once in I think it was 4 million years?

| Depending on how far it is rotated, the Earth's magnetic field will cause
| rotation. On a 27" size tube it can be as much as 1" variance from left
to

| right depending on where you live, in the US, and the direction the tv set
| is facing.



H. R. Bob Hofmann
Guest
Posts: n/a

02-28-2004, 03:54 PM

"Patch" <(E-Mail Removed)> wrote in message news:<n1J%b.4026\$Pc.520@okepread02>...

> "Alan" <(E-Mail Removed)> wrote in message

> news:(E-Mail Removed) om...

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>

> Don't mess with the yoke, put a couple of shims under the low side. LOL

First I would paint a nail polish or some other fast-drying paint stripe between the yoke and something that is fixed, like the pic tube itself, to allow me to get back to zero. I would then rotate the yoke slightly, maybe half of what correction I thought would be needed.

I would stop at that point, and see what the results look like on the picture side of the set, is it straighter, is the convergence, especially around the edges no worse than what it was before, are the reds still red (for a purity check), etc. If the results were ok at that point, I would do another rotation and see if all is still ok.

If the midpoint has introduced more problems, the painted stripe will allow you to get back to ground zero, then put the shims under one side of the set as suggested and don't put anything on top that is wet and might spill into the set :-)

H. R. (Bob) Hofmann



Asimov
Guest
Posts: n/a

02-29-2004, 04:47 AM

"john" bravely wrote to "All" (26 Feb 04 18:06:21)
--- on the heady topic of "Re: Advice on adjusting yoke on TV pic tube"

jo> Reply-To: "john" <(E-Mail Removed)>
jo> From: "john" <(E-Mail Removed)>

jo> You want the Truth..
jo> Leave it alone you will effect
jo> the overall convergence.

The point of "convergence" is to correct for magnetic field anomalies mainly arising in the deflection coil windings. The crt is by far a more precise device. Rotating the yoke a couple of degrees therefore should not affect convergence noticeably because the magnetic offset tabs still align correctly with the deflection coil defects. Obviously any effects of the rotation should be observable at the edges of the crt first, so a white line crosshatch would be a good pattern to monitor the changes as the yoke is rotated. Try it on a junker and see.

Asimov

.... High voltage can give a dangerously uncomfortable discharge.



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