
Subject: Licon switch replacement
Posted by [Van](#) on Wed, 31 Mar 2010 00:00:59 GMT
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I wonder if anyone's found a suitable replacement for this switch?
On/Off-Polarity for a K250-4.

Subject: Re: Licon switch replacement
Posted by [pleat](#) on Wed, 31 Mar 2010 02:25:17 GMT
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I just saw a used one on Ebay.
pleat

Subject: Re: Licon switch replacement
Posted by [Van](#) on Wed, 31 Mar 2010 03:03:01 GMT
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Really?
I looked but didn't see it.
If you find it again, please give me a link.
Thanks

Subject: Re: Licon switch replacement
Posted by [pleat](#) on Wed, 31 Mar 2010 11:15:28 GMT
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<http://cgi.ebay.com/ws/eBayISAPI.dll?ViewItem&item=140395453245> Starting bid of 24.95

Subject: Re: Licon switch replacement
Posted by [Van](#) on Wed, 31 Mar 2010 13:34:45 GMT
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Found it. THANKS!

Subject: Re: Licon switch replacement
Posted by [fairman36](#) on Wed, 14 Apr 2010 20:24:39 GMT
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Here is a possible replacement power/polarity switch for the K250: Mouser #633-UB16KKW015CCC-RO. I have just made this replacement on a unit and it seems to be doing fine.

Subject: Re: Licon switch replacement
Posted by [Van](#) on Wed, 14 Apr 2010 21:11:05 GMT
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Cool find.
Although I see it's rated at 5 amps.
The original is rated at 10 amps. Not sure if that's overkill or not.
I found a used switch on eBay and am awaiting its arrival today (hoping).
Paid through the nose.

Subject: Re: Licon switch replacement
Posted by [fairman36](#) on Fri, 16 Apr 2010 18:58:19 GMT
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Licon manufactured its switch to handle 10 amps, but Kustom only needed a switch that could handle 3 amps, as evidenced by the fuse rating. Anyone needing help with this replacement can email me at fairman36@yahoo.com.

Subject: Re: Licon switch replacement
Posted by [Van](#) on Fri, 16 Apr 2010 19:12:01 GMT
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That's good to know. Thanks for the info.

Subject: Re: Licon switch replacement
Posted by [stevem](#) on Tue, 20 Apr 2010 17:09:47 GMT
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Its looks like the Mouser part number 633-UB15KKW0165G-JB with a blue LED and a whtie defuser might be the one to go with.
The LEDs voltage feed would have to be cut back with some resistance so it lives, but that should not be all that much of a problem.
It is over 2 times the price of the one that you posted though!

Subject: Re: Licon switch replacement

Posted by [fairman36](#) on Thu, 22 Apr 2010 21:57:55 GMT

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I was not able to find Mouser P/N 633-UB15KKW0165G-JB in their online catalog. Could you please check that?

Subject: Re: Licon switch replacement

Posted by [stevem](#) on Fri, 23 Apr 2010 09:53:49 GMT

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Yup, mistake!

Its part number

633-UB15KKWO16G-JB priced at 21 dollars and change.

Subject: Re: Licon switch replacement

Posted by [stevem](#) on Fri, 23 Apr 2010 09:59:08 GMT

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One thing to note though on these switches is that while the 5 amp rating is good for the K150 and K250 model amps, when using these replacement switches in the K300 and K600 PA heads Both sides of the switch should be wired up to double the amperage rating.

Subject: Re: Licon switch replacement

Posted by [fairman36](#) on Fri, 23 Apr 2010 17:10:19 GMT

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I agree with you; the Mouser 633-UB15KKW016G-JB appears to be the best choice for the K150/250. However, I don't see how this switch could work in a K300 or 600. There is only one pole and it alone must handle the current.

Subject: Re: Licon switch replacement

Posted by [stevem](#) on Fri, 23 Apr 2010 17:12:47 GMT

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Your right once again, I was thinking that the DPDT version would be the one to go with for the 300 and 600 since that would handle up to 10 amps when using both polls.

Subject: Re: Licon switch replacement

Posted by [fairman36](#) on Sat, 24 Apr 2010 15:24:20 GMT

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I agree; DPDT would work for the 300/600. Also, when I had the 633-UB16KKW015CCC-RO in the K250 I was repairing, I measured 2.2 volts across the LED. While this is a bit higher than the spec rating of 1.85V and may shorten the expected life of the bulb (although I put the unit through several hours of burn-in), it is comfortably within the rating for the super-bright and should not require any extra resistors.

Subject: Re: Licon switch replacement
Posted by [stevem](#) on Mon, 26 Apr 2010 09:51:10 GMT
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Its just a habit a have from my model railroading hobby I guess as I have found that powering LEDs 20% down from there rating will let them live forever.

Subject: Re: Licon switch replacement
Posted by [fairman36](#) on Thu, 29 Apr 2010 05:03:20 GMT
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Agreed again. And if the voltage across the super-bright LED in the K300/600 is about 2.2V like it was in my K250, that is actually about 50% of the rating, so it should last even foreverer. Incidentally, the Mouser part number for the DPDT super-bright switch for the K300/600 would be 633-UB26KKW016G-JB. As SteveM has pointed out, be sure and connect the poles together, then connect the normally open throw contacts together, then connect the normally closed throw contacts together.

Subject: Re: Licon switch replacement
Posted by [gdtaylor](#) on Thu, 29 Apr 2010 21:26:57 GMT
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LICON SWITCH REPLACEMENTS...

For those interested I have come up with a KIT containing all the parts to replace those LICON switches and yes the illuminated ones also. e-me: doug@dougaylorcontrols.com for details.

Subject: Re: Licon switch replacement
Posted by [ndemattia](#) on Sat, 11 Sep 2010 18:58:19 GMT
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I am repairing a Kustom K150-1 and need to replace the blue power & polarity switches. Just wanted to confirm that the Mouser 633-UB15KKW016G-JB would do the trick. It looks like an electrical match, but is it a physical match as well. Does it just snap into the existing square opening? Thanks!

Subject: Re: Licon switch replacement
Posted by [stevem](#) on Mon, 13 Sep 2010 13:29:15 GMT
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Does this amp still have the busted original switches?
Many times with the way the break at the body section on the front side of it mounting bracket they can just be pulled back up to the bracket thru the use of small cable ties.

Subject: Re: Licon switch replacement
Posted by [dndemattia](#) on Mon, 04 Oct 2010 14:49:03 GMT
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Does anyone have schematics for a K150-1. I need to verify some things before I put in the new switches. Thanks!

Subject: Re: Licon switch replacement
Posted by [chicagobill](#) on Mon, 04 Oct 2010 18:32:45 GMT
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What is it that you need to know?

Subject: Re: Licon switch replacement
Posted by [dndemattia](#) on Mon, 04 Oct 2010 21:45:03 GMT
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Need to see the wiring diagram for the power switch & Polarity. Some of the wires were disconnected before amp got to me and need to verify the switch connections.

Subject: Re: Licon switch replacement
Posted by [chicagobill](#) on Mon, 04 Oct 2010 22:16:13 GMT
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PM your email to me and I can send you the switch wiring diagram.

Subject: Re: Licon switch replacement
Posted by [dndemattia](#) on Wed, 06 Oct 2010 15:32:32 GMT
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Just got the switches in..What does the Polarity switch do??? When should the Polarity switch light come on?

Subject: Re: Licon switch replacement
Posted by [stevem](#) on Wed, 06 Oct 2010 16:20:17 GMT
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That switch will do nothing once you do what should be done to the and that is to replace the two conductor ac cord with a 3 conductor cable that will have the green ground wire bolted down to the chassie.

This will properly ground the amp.

Its lamp will turn on when the power switch is pushed on.

Subject: Re: Licon switch replacement
Posted by [dndemattia](#) on Wed, 06 Oct 2010 16:49:26 GMT
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Stevem,

Thanks! The ground wire modification had already been made before the amp came to me. My main problem is that the current limiting resistor I put on the new LED switch is getting very hot while the power switch LED is not. Both dropping resistors are 3.3k 1/2 watt in series with the 400 ohm 10w dropping resistor already in the amp.

Subject: Re: Licon switch replacement
Posted by [stevem](#) on Wed, 06 Oct 2010 18:40:07 GMT
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Are both LEDs the same ones?

Subject: Re: Licon switch replacement
Posted by [chicagobill](#) on Wed, 06 Oct 2010 21:21:50 GMT
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The resistor is getting hot because there is a lot of current being drawn through it. There is either a short in the wiring or the led is wired in reverse, or it is shorted.

Double check your wiring and test the led.

And by the way you don't need the large 400 ohm resistors in the circuit anymore.

Subject: Re: Licon switch replacement
Posted by [dndemattia](#) on Wed, 06 Oct 2010 21:46:42 GMT

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Both switches have the LED built in and are the same type discussed on this forum from Mouser. The LED in the Power switch is fine. Will check for shorts or errors in wiring on my part on the polarity switch LED (seemed pretty straight forward). What is the voltage supposed to be at the polarity switch old pilot light? It looks like it comes right off the bridge rectifier. Just a general question - Do I really need the polarity switch? If not, how do I handle the .022 cap on the incoming AC power? Thanks again for all the help!

Subject: Re: Licon switch replacement
Posted by [chicagobill](#) on Thu, 07 Oct 2010 16:02:55 GMT
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The original switches had 28 volt bulbs inside of them. The 45 volts from the power supply was reduced by the large 400 ohm resistors to get to 28 volts.

If the bulb is not in the circuit, there will be no current draw and no voltage drop across the 400 ohm resistor. If you measure the voltage at the resistor, it will still read somewhere around 45 volts dc.

The LEDs will draw very little current compared to the original light bulbs. So if your dropping resistor is getting hot, there has to be a problem in the circuit.

As for the polarity switch and cap, remove the cap if you have a 3-wire power cord. For that matter you don't need to wire in the polarity switch at all.

In the old days the chassis of the amp was connected to the ac line through a capacitor, to reduce hum. The polarity switch would choose which side, either the hot or the neutral side of the ac line, would be connected to the chassis via the cap.

Modern standards do not allow for the polarity switches anymore, so some people will remove them from their amps.

Subject: Re: Licon switch replacement
Posted by [richardjohnson](#) on Wed, 26 Aug 2015 18:04:46 GMT
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I have three 250's with bad switches anyone have any ideas

Subject: Re: Licon switch replacement
Posted by [stevem](#) on Wed, 26 Aug 2015 23:20:39 GMT
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I have replacements that are new, but of different manufacture and look 95% the same when

mouted in the front panel .they are not cheap unfortunately at 60 bucks before shipping.
The only other thing you can do is to mount a regular size DPDT switch on the original mounting bracket and have its bat handle poke thru the face.
If only your switches threaded shank is cracked ckean and not missing peices you can use nylon cable ties to pull it back together around the mounting bracket.
I do this to all my metal face amps just to reinforce the switch and take the push load off of the shank!

Subject: Re: Licon switch replacement
Posted by [richardjohnson](#) on Thu, 27 Aug 2015 19:26:10 GMT
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Are you making these switches.I now need just one new one I repaired the rest.Is that 60.00 for six thank you for your reply

Subject: Re: Licon switch replacement
Posted by [stevem](#) on Fri, 28 Aug 2015 10:18:41 GMT
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I wish they would be so inexpensive !
I do not make them, they are sold / I buy them in 3 sections, the switch, the proper LED lamp and the blue lens.
I mark them up only 25% when I sell them so that gives you a idea as to how expensive a near drop in switch is for these amps.

Subject: Re: Licon switch replacement
Posted by [richardjohnson](#) on Wed, 02 Sep 2015 18:38:57 GMT
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how much for just the blue lens.If I had that I can make my switch work.Thank you and have a great day

Subject: Re: Licon switch replacement
Posted by [stevem](#) on Thu, 03 Sep 2015 10:33:44 GMT
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I do not know if the lens for the switches I have will work with the licon switch, I will have to get back to ya.

Subject: Re: Licon switch replacement

Posted by [richardjohnson](#) on Fri, 04 Sep 2015 19:21:04 GMT

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I am building my own switch.I just need the presence of the blue cube on the front.I have gone to an on off on in the back panel which will eliminate both switches in the front..

Subject: Re: Licon switch replacement

Posted by [stevem](#) on Mon, 07 Sep 2015 11:03:02 GMT

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The Lens used with my replacement switch is .505" square, the original is .615", I guess you could build it out with some styrene to fill the gap.

Subject: Re: Licon switch replacement

Posted by [richardjohnson](#) on Mon, 07 Sep 2015 17:44:18 GMT

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How much for the cube

Subject: Re: Licon switch replacement

Posted by [stevem](#) on Tue, 08 Sep 2015 10:22:40 GMT

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You can order them from where I got them, Newark.com part / skew number 17C6557

Subject: Re: Licon switch replacement

Posted by [richardjohnson](#) on Tue, 08 Sep 2015 17:22:51 GMT

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Thank you for the help .I made four and they turned out super well.vacuform The same way I build cowls and canopies for radio control airplanes.I will float the led in epoxy on the back side along with a push off on switch with a bracket mounting about like the original.Looking original and as good as new.You guys are super
