Subject: Model 1-B /SE540L driver chip

Posted by JayB on Sat, 30 May 2009 22:05:55 GMT

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Hi, just joined the forum, you guys have a cool site here.

I've got an early seventies 1-B I'm repairing, it's definitely got a dead SE540L driver chip that was used in Kustoms of that era. I've been going bonkers trying to locate one, it seems funny that \$250 minimum surplus houses claim to have hundreds and yet there's zilch availability otherwise.

Does any anyone know of a source for these 10-legged radial buggers? Or if not, a conversion mod that'll work? Any help would be appreciated.

Thanks, JB

Subject: Re: Model 1-B /SE540L driver chip

Posted by stevem on Mon, 01 Jun 2009 10:04:21 GMT

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What the PC board number that it is on?

Subject: Re: Model 1-B /SE540L driver chip

Posted by JayB on Mon, 01 Jun 2009 16:12:24 GMT

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The board # is PC5131 REV O. Never seen another Kustom that used TO-220's as power devices. I don't have a schematic but crossed the power transistors to TIP31/32's, and can pass signal through them where they connect to the SE540L so I'm pretty certain the chip is bad- it won't pass signal through it's input.

Thanks for the reply, JB

Subject: Re: Model 1-B /SE540L driver chip

Posted by stevem on Tue, 02 Jun 2009 10:20:18 GMT

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I have never seen a Kustom of the era that used TO-220s eitheir! Can you get a manufacture date off of any of the amps pots, it should start with 137 and then 4 other numbers?

Subject: Re: Model 1-B /SE540L driver chip

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The CTS pot codes are from mid 1973. The amp uses a ganged (dual) volume pot; has bass, middle and treble with a pull bright. No 'verb or trem on this sucker. There's a riveted plate on the back with serial # K-122619. I had a feeling this thing was an uncommon dog, but didn't other amps from the slant front era use the SE540L chip?

Thanks again, JB

Subject: Re: Model 1-B /SE540L driver chip

Posted by chicagobill on Tue, 02 Jun 2009 22:42:24 GMT

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I think that the I-B may be the only Kustom amp that used that driver chip. I remember repairing one maybe 20-25 years ago, dead NE540 chip.

If I dig far enough down, I may still have one of those NE540 chips around. I sent one to someone a few years ago, never heard back if he got it or if it fixed his amp.

That's one of the downsides of these forum, a lot of people come here looking for parts and answers to questions, but don't have the time or manners to let us know how things worked out or to even say thanks. But I digress, I try and look for the chip this coming weekend.

Subject: Re: Model 1-B /SE540L driver chip

Posted by JayB on Tue, 02 Jun 2009 23:37:08 GMT

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Hey, thanks for the reply. I figured this thing was rare rather than well done. If you do turn up an IC, name your price- it'll be more than appreciated.

Thanks again, JB

Subject: Re: Model 1-B /SE540L driver chip

Posted by stevem on Wed, 03 Jun 2009 09:56:16 GMT

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The NE540 does not quite have the specs of the SE40, but I guess in that circuit its not being pressed that hard.

I wish I had a schemtic of any amp that used that driver as there has to be a way to use a different op amp chip, or even two T-O5 type drivers to take the 540s place.

If you look at the circuit board, are pins 1 and 5 being used?

Subject: Re: Model 1-B /SE540L driver chip

Posted by JayB on Wed, 03 Jun 2009 23:13:58 GMT

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Yeah, pins 1+5, the so-called "power limit" pins of the chip are tied into the power transistors with resistors, and to what could be a feedback circuit. For the hell of it I just overpaid for a schematic from Musicparts to see if I can figure this thing out, more as an exercise than anything else-otherwise it's looking like a waste of time. The difference between the NE and SE 540L chips are in voltage rating- the NE has a max of 22 and the SE 27, this thing has 25 on it. How's that for useless arcane knowledge?

Thanks for the replies, JB

Subject: Re: Model 1-B /SE540L driver chip

Posted by stevem on Thu, 04 Jun 2009 10:02:05 GMT

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can you fax me a copy of that?

Subject: Re: Model 1-B /SE540L driver chip

Posted by pleat on Thu, 04 Jun 2009 12:32:11 GMT

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I remember I had a Kustom challenger that the Se540 chip was bad.

If it's the round silver 10 legged thing that looks like a transitor, you may have a hard time finding one.

Bob Brinkman who was with Kustom for years. Bob told me that they haven't made that IC since 1975 and he had three he was holding on to. I know the challenger ended up as an endtable. No fixing it. Bob passed away a year ago so I'm no help on finding one, just thought I'd pass on that info. Big reason why I stay away from the slant metal face amps.

Don

Subject: Re: Model 1-B /SE540L driver chip

Posted by stevem on Thu, 04 Jun 2009 13:14:06 GMT

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the seperate head type metal face K150 250 300 and 600 do not use tha chip it seams just some combos did.

Subject: Re: Model 1-B /SE540L driver chip

Posted by JayB on Thu, 04 Jun 2009 15:07:35 GMT

I don't have a fax setup right now, what I received from Musicparts was a pdf. I'd be more than happy to email you a copy, or is there a way to attach it here?

Thanks, JB

Subject: Re: Model 1-B /SE540L driver chip

Posted by stevem on Thu, 04 Jun 2009 16:03:29 GMT

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You can sent it to Steven.Magnotti@avispl.com.

Subject: Re: Model 1-B /SE540L driver chip

Posted by stevem on Thu, 04 Jun 2009 17:30:10 GMT

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You know it would probibly be cheaper to get rid of most of that output stage and install something like a LM4766 output IC pack than but a SE540L chip!

Subject: Re: Model 1-B /SE540L driver chip

Posted by JayB on Thu, 04 Jun 2009 23:37:26 GMT

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That's actually a very good and practical idea.

Thanks, JB

Subject: Re: Model 1-B /SE540L driver chip

Posted by stevem on Fri, 05 Jun 2009 10:30:46 GMT

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That pack number I posted is wrong, as its stereo, bot a NTE118 pack is a mono 50 watt pack that will run off of your power supply rails 26 volts and cost less than 7 bucks!

I would also add a good amount of finded heat sink to mount it on and then bolt that to the chassie.

Subject: Re: Model 1-B /SE540L driver chip

## Posted by JayB on Mon, 15 Jun 2009 18:37:17 GMT

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First off, thanks to everyone for their replies and suggestions, they were appreciated.

While I was about to convert the amp over to an LM3886 I came across(not that big a deal), a better, simpler solution came along. Chicago Bill dug up a C540H and sent it my way. Popped it in and the amp now works perfectly.

Thanks so much Bill, and to the rest of you guys, you were really helpful.

This is what a repair forum should be, kudos to you all.

JB