Guitar Amps - General

Archive

50 messages in thread:

Marshall Tone - NEW: 12/17/98 22:06
| Al 12/6/98 01:59
---| TMiller 12/6/98 02:52
------| Al 12/6/98 18:41
---| Michael Sullivan 12/6/98 03:22
---| Richie 12/6/98 05:07
------| Richie 12/6/98 05:11
---------| Al 12/6/98 13:44
------------| ken 12/15/98 18:47
------| Al 12/6/98 18:35
---| Mook 12/6/98 14:02
------| Al 12/6/98 18:33
---------| Michael Tousek 12/6/98 20:40
------------| Richie 12/7/98 00:32
---------------| Richie 12/7/98 00:34
------------------| Liam 12/7/98 10:30
------------| Steve A. 12/9/98 08:25
---------------| Michael Tousek 12/16/98 22:11
------------------| TMiller 12/17/98 16:32
----------------------| dave rutherford 12/17/98 22:06
---------Re: Marshall Tone -- HOLD EVERYTHING
---------| Mook 12/7/98 12:51
------------| Richie 12/7/98 13:36
---------------| Mook 12/7/98 13:57
------------------| Michael Sullivan 12/7/98 16:26
----------------------| Reid Kneeland 12/8/98 01:30
----------------------| J Fletcher 12/8/98 20:40
----------------------Michael...about the eyelet board material..
----------------------| Trace Allen 12/10/98 16:27
------------------------| Carlo 12/11/98 06:13
------------------Re: Marshall Tone -- HOLD EVERYTHING
------------------| Richie 12/7/98 23:38
----------------------| Steve A. 12/9/98 08:43
------------------------| Mook 12/9/98 09:06
--------------------------| Richie 12/10/98 19:55
----------------------| Trace Allen 12/10/98 16:30
------------------------| Mook 12/10/98 16:57
------------| Mook 12/7/98 15:58
---------------| Dave Stork 12/7/98 16:50
------------------| Michael Sullivan 12/7/98 17:26
---------------| MKB 12/7/98 17:18
------------| Bruce 12/7/98 19:01
---------------| Mook 12/8/98 00:51
---------------| Bruce 12/8/98 05:36
------------------| Mook 12/8/98 10:24

----------| Bruce 12/8/98 16:37
----------| Mook 12/9/98 09:19
----------| Bruce 12/10/98 05:45
---------Re: Marshall Tone
---------| MJ Harnish 12/7/98 18:01
----------| Mook 12/8/98 10:28
----------| Kevin Timm 12/9/98 02:55
----------| Mook 12/9/98 09:30
----------| Richie 12/9/98 15:21
----------| Liam 12/11/98 12:23

Marshall Tone

Al *dusomethin@netscape.net*
12/6/98 01:59

Hoping to find some good advice out there, and this place seems to have plenty of experienced players.
I wanted that 'late 60s early 70s' tone, so I aquired a re-issue Marshall 1959SLP and sold the Boogie. I play a Les Paul that is loaded w/ 57 Classic pickups. I also use a PowerBrake to drive the power tubes without killing everything in a 50yrd radius.
Here's the rub - setting all controls to 10 isn't what it's cut out to be. But I've tried nearly every variation in between without 'getting there'. I jump the two channels and usually plug into the Channel 2. Driving Ch2 a little more than Ch1 offeres up a warmer sound, but the bottoms get farty. Going the other way gets too midrangy and bright(according to other band members).
Do you suppose there is a problem with the Plexi?? Are the great settings a trade secret?? Are there mods required even with these great amps??
Would appreciate any input.

al

Re: Marshall Tone

TMiller *Tonefactor@aol.com*
12/6/98 02:52 *in reply to* ***Al***

The only Plexis that sound good with all the controls on 10 are the very early ones. These had the shared cathode resistor/cap on the first tube, the .022 cap instead of the .0022, and a tone stack more like the JTM-45. The Plexi that the 1959SLP is based on, is an extremely bright sounding amp. I personally think Marshall chose the wrong circuit to reissue, the earlier ones sound much better.

Re: Marshall Tone

Al *dusomethin@netscape.net*
12/6/98 18:41 *in reply to* ***TMiller***

TMiller,
thanx for your assessment of my situation. I've been fighting with this beast for 2 months now wondering why this 'tone machine' is so bright. Any thoughts on correcting it. I'm not very fluent in electronics, but think now is a good time to start. I'm hoping I at least have a good platform with the Plexi to start with.

al

Re: Marshall Tone

Michael Sullivan *vairhead@earthlink.net*
12/6/98 03:22 *in reply to* ***Al***

Al,

I'd always heard that most of the "name" guys turned up all the tone controls except the bass, which, on average, ran at three to five on a scale of ten. Nigel Tufnel fans will tell you four to six on his "scale of eleven" amps.

As an aside, a friend who worked at Sunn, in, I believe, Tualatin, Oregon, in the late '60s, swore that when the first BIG Sunns were auditioned by Jimi Hendrix, the volume controls were labelled to a max of eight. JMH complained that the amps needed to be louder, so a second audition was set for the next day. The silkscreen folks ran off a bunch of new faceplates, these labelled to a max of ten, and those faceplates installed on the audition amps. Hendrix was back in the plant that afternoon, played them, and bought six stacks.....

Not having been in the States at that time, I cannot vouch for the authenticity of that claim. I can say that Fast Eddie told me some other outrageous stuff that has since been proven true.

Re: Marshall Tone **Richie** *richiehall@wwd.net*
12/6/98 05:07 *in reply to* ***Al***

Al; I agree with T Miller, I guess most have heard that with just about any amp,if you put ten of the same kind side by side,you'll have one out of the ten that just kills the other nine!I guess its the + or - of tolerences of components or how it was set up. I like to change all my marshalls to bass amps, and change a few other things to suit my taste,others may like the lead amps,but to me they are just to bright sounding,and take the 470pf cap off the bright channel.Their are a few things you can change to get a sound you might like. [Richie]

Re: Marshall Tone **Richie** *richiehall@wwd.net*
12/6/98 05:11 *in reply to*
Richie

I forgot to add,the speakers make alot of difference of how the amp will sound and react to your playing.You said you use a power brake, you should look into building a plexi jr, [Richie]

Re: Marshall Tone **Al** *dusomethin@netscape.net*
12/6/98 13:44 *in reply to*
Richie

Regarding the speakers, I use a 4x12 w/ Greenbacks. You feel taking the 470pf cap off the bright channel will tame it some?

Re: Marshall Tone **ken** *kd@teleport.com*
12/15/98 18:47 *in reply to* ***Al***

I disagree. That's not the right mod to make. There is a .005 bypass cap over the bright channel volume control that is the worst offender. Its turning your volume into an off/on switch and really attenuating the lows and low mids. Consider removing or reducing to 100pF or whatever your ear likes better.

-ken

Re: Marshall Tone **Al** *dusomethin@netscape.net*
12/6/98 18:35 *in reply to*
Richie

Regarding the few other things I could change, I'm all ears.

al

Re: Marshall Tone **Mook** *Mookie2112@aol.com*
12/6/98 14:02 *in reply to* ***Al***

I have a 50Watt plexi re-issue. While is not the best marshall I've ever heard, I does a pretty damn good job.

I think the 50Watt version has "more balls" than the 100 Watt version. Can you take back the 100watter and try out the 50 watt????

I play humbucker guitars. I also have a Power Break. I set the controls as such: Presense is about 5-6, Bass is 5, Mids depends on the guitar (Maple guitars sound good at 6 to 8, Mohogony sound good about 4-5, Les Pauls sound good at any Midrange setting), Treble at 6-8. I only use Channel 1 (the bright channel). I set the volume as such: 2 for clean chords, 4 to 6 for Allman Bros and Rush type stuff, I usually don't set the volume above 8, cause it gets too distorted.

Then I adjust the final volume with the Power Break. I also use a Marshall 4x12 cab - this helps alot.

If you're looking for a very "scouped" sound, the non-master marshall is probly not the way to go. Maybe you'll like the 2210 version of the marshall better.

Mook

Re: Marshall Tone **Al** *dusomethin@netscape.net*
12/6/98 18:33 *in reply to*
Mook

Thanx for the settings. Will try them out soon. I've had the 100 Watt to long to return, so I'm committed to make it work or sell.
Any strong recommendations in modifying? This will be my first mod, so again, any direction toward 'great tone' would be appreciated.

Re: Marshall Tone **Michael Tousek** *rein0242@frank.mtsu.edu*
12/6/98 20:40 *in reply to* ***Al***

Al,

I don't have any first-hand experience, but I 've heard that the reissue greenback speakers tend to be a bit icepicky, tonewise. You might try auditioning a cab loaded with Vintage 30's, which I have heard first-hand and really like.

The 470pf cap that goes around the volume control of the bright channel is essentially out of the circuit when the volume is on 10, so removing it wouldn't help you. There is, however, a 470pf cap around the 470k mixer resistor that you might try removing (the JTM45's don't have this cap, and I don't think the early plexi's have it either).

This is second-hand info again, but I've heard that the factory bias on some of these amps is on the "cold" side. This could lead to harsh highs and would be most evident at the highest volumes.

Michael Tousek

Re: Marshall Tone **Richie** *richiehall@wwd.net*
12/7/98 00:32 *in reply to*
Michael Tousek

It might depend on how new or old of a model JTM-45 you have,some had 470k resistors with the 470pf cap across it,some early Reissue schematics show a 270k as in the bassmans with a 556pf cap. but no matter which one,removing the cap will lessen some of the brightness, the cap across the volume [or on the pc board] .002 .003 or 100pf should be ok,just don't set everything to ten,turn some of the treble down to 4 or 5 and the presence on 4 or so.put the mid on about 5, And as Michael said check your bias and see how its running. What power tubes are in it? [Sovtek?] Give a little more info and we can go from there. You might also put a .01 cap across the feed back resistor to help. [Richie]

Re: Marshall Tone **Richie** *richiehall@wwd.net*
12/7/98 00:34 *in reply to*
Richie

Another thing that some do is use a tube preamp or tube screamer and use the tone of the pedal to help thicken the sound. [Richie]

Re: Marshall Tone
12/7/98 10:30 *in reply to*
Richie

Liam *lph1@ukc.ac.uk*

CHECK THE BIAS! A lot of the plexi's are very cold from the factory. This gives them a vey cold and harsh sounding distortion. If it has Sovtek EL34's this explains mushy bass. Put some Svetlanas in it if you want to tighten the bass up, but never use more than 6 on the bass control if you want to keep it sounding tight.

Changing capacitors in the tone circuit can have nice results, but if you haven't got the bias right, and power valves that are capable of producing the sound you want, you'll be fighting a losing battle.

The Tube Screamer is a great way to drive a Plexi.

Re: Marshall Tone
12/9/98 08:25 *in reply to*
Michael Tousek

Steve A. *steveahola@worldnet.att.net*
http://www.techaccessinc.com/blueguitar/

Michael:

There is, however, a 470pf cap around the 470k mixer resistor that you might try removing...

I jotted down a note from a post here almost a year ago about how some people have had really good luck replacing that 470pF cap on Marshalls with a 560pF. I picked up some 560pF mica caps especially for that purpose and think that they work well in Marshall-y circuits.

Although there is an equation for the specific frequencies effected (that I don't use!), I've had a lot of fun experimenting with different caps and resistors. As you go up in value from 470pF the "treble boost" across the 470k mixer resistor becomes more of a midrange boost. In hooking the caps up to a center-off DPDT mini-toggle switch, I find that the sound is a bit lifeless with no cap at all... but if the overall sound of that channel amp is way too bright (after reducing or removing the bright cap) then that might be a good choice.

In place of the 470pF cap, you can try 390pF, 560pF, 630pF or 680pF (by the time you get up to 750pF or 820pF the next stage is probably going into some serious overload...) And in place of the 470k mixer resistor, a 390k resistor will push more of the direct signal on through to the next stage (although with a 2 channel amp design like a 1959 that could make the 2 volume controls less independent).

Steve Ahola

Re: Marshall Tone
12/16/98 22:11 *in reply to*
Steve A.

Michael Tousek *rein0242@frank.mtsu.edu*

Steve,
That's interesting, the idea of going up with this cap value (the 470pf) rather than reducing or removing it. Like you said, I suppose it would reach a point where it'd let midrange frequencies through -- and eventually low frequencies -- along with the highs. Pretty neat.

Boy, this thread has gotten really big; seems like amp lovers never get tired of yakking about those Marshalls (I know I don't!).

Michael Tousek

Re: Marshall Tone **TMiller** *Tonefactor@aol.com*
12/17/98 16:32 *in reply to* ***Michael Tousek***

Why would you want to reduce it lower than 470 pf? Wouldn't that just let the really annoying highs through?

Re: Marshall Tone **dave rutherford** *dhr@superlink.net*
12/17/98 22:06 *in reply to* ***TMiller***

It would let less highs overall through. Just like reducing the vol bypass cap. IMO, the huge vol 0.005 uf bypass cap is the one to reduce. I prefer 500 or 250 pf.

Re: Marshall Tone -- HOLD EVERYTHING **Mook** *Mookie2112@aol.com*
12/7/98 12:51 *in reply to* ***Al***

I opened up my re-issue 50W plexi to change the stock caps to Orange Drops a few days ago. Yesterday, I did so checking of the circuit board, just to make sure things are up to snuff.

Well...they weren't. I found two major snafus that are not on the available schematics.

The first problem was the presense control. It was wired totally different than the schematic. In addition the feedback resistor was a 100K instead of the usual 47K.

The second problem was the coupling caps. On the schem, there are coupling caps coming from each side of the PI and goes into the grid of the EL34. Both caps are rated at .022uF. In my amp, one side had the .022uF and the other side had a .1uF.

Well to fix things, I put both PI coupling caps to .022 Orange Drops, replaced the feedback resistor from a 100K to a 47K, and changed the wiring on the presense contol to that shown in the schematics.

After plugging in, I amp was totally different. It did not distort near as much as before, In fact it remained rather clean. Also, it had alot more harmonics and retained the guitars character alot more.

My Marshall distortion was gone and I was crushed.

Seems changing to Orange Drops increased the harmonic content. But decreasing the feedback resistor seemed to decrease the distortion factor. Can I disconnect the negitive feedback in the Marshall? I realize the Presence control will not work after that. Should I changed both PI coupling caps to .1uF (remember, one was .022 and the other was .1uF)?

Dazed and Confused,
Mook

Re: Marshall Tone -- HOLD EVERYTHING

Richie *richiehall@wwd.net*

12/7/98 13:36 *in reply to* ***Mook***

Mook; I use the .1uf caps in mine to help bass responce,I would also change the feedback resistor back to the 100k, but you can put in a 47k,56k or what works best for this amp.I also like to change the tone by changing the 33k and 500pf cap to a 56k and 250pf cap[different tone slope] This is already in the JTM-45 or old plexis.Marshall changed this when they went to the lead or bass models.And to me the lead models are just to thin sounding,so I change mine to the bass models for mre thick chunky sounding.Another thing is that Marshall used lead and bass speakers,most people just talk about celestions,but Hendrix used the bass celestions[and some others] and supposed to like the bass marshalls better, and had his lead amps changed. But "Who Knows" [Richie

---

Re: Marshall Tone -- HOLD EVERYTHING

Mook *Mookie2112@aol.com*

12/7/98 13:57 *in reply to* ***Richie***

So you use the .1uFs as the coupling cap from the PI, maybe I should change these too.

So, If I change back to a 100K feedback resistor, I will get LESS feedback and this would RAISE gain, right? What if I change it to 220K?

Mook

PS - Man, I hate those PCBs!! The foil is on the bottom of the board and comes off very easy!! I feel like redoing the board on fiber board and eyelets.

Re: Marshall Tone -- HOLD EVERYTHING

Michael Sullivan *Vairhead@earthlink.net*

12/7/98 16:26 *in reply to* ***Mook***

Mook,

Try this:

When you want to replace a resistor or cap on a PCB with foil on the unseen side, simply cut the leads off the component you want to replace as close as you can to the body of the component. Straighten the leads up from the board. Bend the leads for the new component around the existing lead a fair distance off the board (at least centerline heighth on a half-watt resistor.) Solder by heating the lead of the NEW component, and solder quickly. This will prevent the solder joint on the board from overheating.

That's almost as good as an eyeleted board, and a HELL of a lot cheaper than paying for a Plexi re-do kit.

If you DO decide to go with a new board and eyelets, I can direct you toward the gasket material for power transformers (like your local power company has on the pole.) It's a green thick gasket material that should readily accept eyelets. I do not believe that it will accept moisture, either.

Now if you have a source of eyelets for 1/8" material (other than Hoffman at $0.05 ea,) I'd appreciate it. I'll buy a couple thousand just to have them around to build my own boards or install into existing Fender boards.

Re: Marshall Tone -- HOLD EVERYTHING

Reid Kneeland *reid@tti.com*

12/8/98 01:30 *in reply to* ***Michael Sullivan***

> *Now if you have a source of eyelets for 1/8" material (other than Hoffman at $0.05 ea,) I'd appreciate it.*

I've had good luck with pop rivets. I use the plain steel (not stainless, and definitely not aluminum!). They work just like eyelets, at least for me. There's a bit more metal, so you have to heat them a little longer. They come in several sizes, but I've always used the smallest ones, and they fit perfectly in 1/8" material.

Now the bad news: I don't remember the price, but it may well work out to more than five cents each... is that really so much?

Reid

Re: Marshall Tone -- HOLD EVERYTHING

J Fletcher

12/8/98 20:40 *in reply to*
Michael Sullivan

Keystone makes these eyelets. I buy them from Electrosonic in Canada, don't recall the price though. They also have the eyelet staking tool. Keystone 718-956-8900, Fax 718-956-9040. Maybe Mouser sells them also. Called "wide roll eyelets" catalogue # 22 to 48, depending on size....Jerry

---

Michael...about the eyelet board material..

Trace Allen *Shameus1@aol.com*
http://members.aol.com/ItznotMe98/

12/10/98 16:27 *in reply to*
Michael Sullivan

Michael;

I'd be highly interested in knowing where to get the material for the eyeley boards you were refering to!
I'm building a very beefed up version of a Tweed Deluxe and I was trying to decide what to go with and I'd like to use an eyelet board. Do you know where I could get the parts for point to point (the stuff they used before the eyelet boards?
Thanks so much for your help Michael!

Trace

Re: Michael...about the eyelet board material..

Carlo *funkyloon@aol.com*

12/11/98 06:13 *in reply to*
Trace Allen

Trace,

> *Do you know where I could get the parts for point to point (the stuff they used before the eyelet boards?*

Are you referring to terminal strips? Radio Shack has 5 position strips,(center one is ground), cat. #274-688B.

Carlo

Re: Marshall Tone -- HOLD EVERYTHING

Richie *richiehall@wwd.net*

12/7/98 23:38 *in reply to*
Mook

Mook; if you change it to 220k it will be too much,you will barely have to turn the volume to get it to the same setting as maybe 4 with the 100k, you will have less of the clean sound.The amp will break up alot sooner and not much room for a clean sound.I would'nt try the 220k. [Richie]

Re: Marshall Tone -- HOLD EVERYTHING

Steve A. *steveahola@worldnet.att.net*
http://www.techaccessinc.com/blueguitar/

12/9/98 08:43 *in reply to* ***Richie***

To Richie:

There have been a lot of posts here about adding in a pot (in conjunction with a fixed resistor) for the feedback loop. The fixed resistor would be the minimum value you'd want to use (maybe 27k for a nice constipated sound) and you could cover a lot of ground with a 250k pot- but as you say, it gets pretty wild when you set it over maybe 200k total (including the 47k resistor). Or play it safe and sane, and put in a 100k pot... (BTW try a 330pF treble cap with the 56k slope resistor- Bruce Collins told me about that trick which I call **The Tone Stack of the Gods!**)

To Mook:

You might want to stick with the 0.022uF coupling caps followed by the 0.1uF caps (you'd probably get too much bass going to your output tubes if you stuck in four 0.1uF's). What you called major "snafu's" is Marshall trying to improve the sound, I think. **Too bad that they don't include schematics with their amps like Fender does!** BTW if you have a capacitance range on your DMM I'd recommend matching the pairs of coupling caps as close as you can.

Steve Ahola

Re: Marshall Tone -- HOLD EVERYTHING

Mook *Mookie2112@aol.com*

12/9/98 09:06 *in reply to* ***Steve A.***

Yes, I did do some cap matching. I found 2 O'drops that were EXACTLY .022uF.

What did you mean by "try a 330pf with the 56k slope resistor"? My slope resistor is 33K.

Mook

Re: Marshall Tone -- HOLD EVERYTHING

Richie *richiehall@wwd.net*

12/10/98 19:55 *in reply to* ***Mook***

Mook; Steve is right in his reply,its just a tone change,if you change the 33k to a 56k and the cap 470pf[lead] to a 250pf [bass] and you can play around [tweaking] he suggested a 330pf. You can try different ones to see what you like best.I was just putting in what Marshall used in theirs. I have see people even put in 100k in the place of the 56k but I didn't like it. It was to much bass and lost some of the real tone.[Richie]

Re: Marshall Tone -- HOLD EVERYTHING

Trace Allen *Shameus1@aol.com*
http://members.aol.com/ItznotMe98/

12/10/98 16:30 *in reply to* ***Richie***

Mook;

I agree with Richie on the 220k verses the 100k. I tried once outta curiousity and sure enough...what happened is EXACTLY what Richie described!
The 100k is the way to go and I think you'll end up liking far more. I'd also make the changes that he refered to as well. You'll get better results without a doubt.

Chow for now;
Trace

Re: Marshall Tone -- HOLD EVERYTHING

Mook *Mookie2112@aol.com*

12/10/98 16:57 *in reply to* ***Trace Allen***

I finally settled on a 120K...a bit more distortion.

Mook

Re: Marshall Tone -- HOLD EVERYTHING

Mook *Mookie2112@aol.com*

12/7/98 15:58 *in reply to* ***Mook***

What would happen if I added a .68uF cathode bypass cap to the cathode going into the tone stack??

Mook

Re: Marshall Tone -- HOLD EVERYTHING

Dave Stork *dstork@ibm.net*
http://homepages.infoseek.com/~storkaudio

12/7/98 16:50 *in reply to* ***Mook***

I know it's frustrating dealing with PCBs if you're not used to them. Unless I'm dealing with a component with thick leads and a lot of solder holding it to the circuit board, my preferred method of desoldering components on PCBs is solder-wick. Use a hot iron with a tinned tip and press the wick right down on the pad. Unless the wick is old and its flux has dried up, it will greedily suck up all the solder within seconds and you'll be left with a nice clean pad that hasn't lifted off the board. For even greater effectiveness, I like to add a small amount of additional liquid rosin flux. Of course, any flux remaining on the board after component replacement should be carefully removed with high-purity isopropyl alcohol.

For larger pads or handwired circuits, I use a "Soldapult" solder sucker.

RE cutting off the old component on the top side of the board and soldering the new one to its leads: I've seen this done, but I'd never do it myself except in an emergency. (For example, the amp blows a resistor on a gig and has to be fixed in fifteen minutes). To me, a good repair is one that doesn't call attention to itself.

Re: Marshall Tone -- HOLD EVERYTHING

Michael Sullivan *Vairhead@earthlink.net*

12/7/98 17:26 *in reply to* ***Dave Stork***

Dave,

Yes, I agree, for the most part. However, if I'm dealing with an amp that is in the "well, I really don't know what I want to do so let's change resistor and cap values until it sounds the way I want it to" stage (which is where I thought the discussion was headed,) leaving the leads sticking up is a way to minimize damage to the foil by constantly heating and re-heating the circuit trace. It can be left as a permanent situation if you want, but once correct values are found, it's fairly easy to replace it at the PCB with minimal trauma to the foil.

I know all too well that excessive heat will break down the glue used to hold the foil on the fiberglass PCBs. I prefer to use a Soldapult for solder removal, also. I quit using braided solder-sucker when I quit being a tech for a living. My "problem" now is that I rarely see a circuit board. I work on eyeleted amps. PERIOD. Since I do it as a hobby/addiction, I can pick and choose the amps on which I want to work, thank God.

Re: Marshall Tone -- HOLD EVERYTHING

MKB *markbrid@hickory.net*

12/7/98 17:18 *in reply to* ***Mook***

Hello, Mook. One suggestion for successfully repairing PCB's; Trash the part, save the board. If you are desoldering a big cap like a 600V 0.1uF, it helps to cut the part off the board first, cutting the lead as close to the component side of the PCB as possible. The soldering iron and wick then has a lot less thermal mass to contend with.

Also, the 0.68uF cap on the cathode of the first tube section of the direct coupled stage will make the amp brighter and give it more gain. I have tried this mod in several Marshalls and a tweed Bassman and haven't liked it- these amps have a lot of gain anyway IMHO. If you need more full-frequency gain, you may try something like a 22uF there.

Re: Marshall Tone -- HOLD EVERYTHING

Bruce *missionamp@aol.com*

12/7/98 19:01 *in reply to* ***Mook***

HI Mook!
Hey, Are you sure you were looking at both the coupling caps and not the .1uF presence control cap?
The last one I had in here had the presence cap soldered on the presence control pot. :>)

The RI I had in here had a few oddities too.
The presence control cap was wired with a 1uF instead of a .1uF!
Still had that awfull .005uF bright cap across the volume control too.
Wow! Terrible combination.
Also, if you don't care about the possible effect of resale,
Yank out the FB resistor and run some shielded cable over to a 100K pot (wired as a variable resistor) installed on the back chassis in series with the 47K resistor (soldered right on the pot) back to the PCB FB circuit.
Then bypass the pot lugs with a .001uF to .005uF cap.
Now you still have a presence control and have a tuned feedback circuit that will allow/cut an extra amount of high freq feedback but be variable for the amount of the loosey goosey lower freqs you seem to like! Bigger bottom end with thicker overtones.
The .68uF will really brighten and punch up the overall sound of the amp. You might find that it is pretty cool.
Also, follow the circuit from the volume pots and see what if any bright caps are across the pots.
Limit them to no more then 470pF for an experiment.
And YES to the 56K slope resistor, and 250pF to 330pF treble cap Richie mentioned!
If you want more bottom end, get rid of the .022uF O'Drop MID cap and change it to a .033uF or .047uF O' drop.
Yes that was the MID cap not bass cap.
Don't use .1uF coupling caps until you try all this other stuff first... especially if you

like to play LOUD!

Bruce
Mission Amps

Re: Marshall Tone -- HOLD EVERYTHING **Mook** *Mookie2112@aol.com*

12/8/98 00:51 *in reply to* ***Bruce***

Yeah I'm sure, I checked it 3 times.

The presence pot has the .1uF soldered to it, but not like the schem shows. But then the purple wire off the Presence pot went to a .022 cap. The schem at this point shows a .1 uF cap. Instead the two coupling caps from the PI had .022 and .1, respectively. Again the schem show two .022s. I think the factory switched one of the PI coupling caps for one of the Presence caps.

Anyway, I think I shall try this: Change back to the 100K feedback resistor. Also, I'm going to bridge a 25uF/25V cap across the cathode just before the tone stack. If I like it, I shall make it foot-switchable by replacing the second 2nd channel jack.

Mook

Re: Marshall Tone -- HOLD EVERYTHING **Bruce** *missionamp@aol.com*

12/8/98 05:36 *in reply to* ***Bruce***

Oops!
I screwed that up pretty good!
If you want LESS bottom end with these mods use the next bigger cap on the way to the mid pot!
A .047uF will really kill a lot.

Bruce

Re: Marshall Tone -- HOLD EVERYTHING **Mook** *Mookie2112@aol.com*

12/8/98 10:24 *in reply to* ***Bruce***

I'm going to keep the tone stack as is. I just want to match it to the schematic. And maybe thow in a "boost" switch.

Mook

Re: Marshall Tone -- HOLD EVERYTHING

Bruce *missionamp@aol.com*

12/8/98 16:37 *in reply to* ***Mook***

If you want a boost Mook, try lifting the mid pot from ground with a 250K resistor that you can short across with a switch. The tone section will not work so good after that!
Also, you could try to switch over the top of the tone section with a .0015uF cap in series with a big 500K to 1M resistor.
Shorting out this resistor will send most of the previous stage's signal across the top of the tone section and on to the cathode follwer tube section's preamp.
The switchable 25uF cap you are talking about will have a pretty good thump when you switch it.

Bruce

Re: Marshall Tone -- HOLD EVERYTHING

Mook *Mookie2112@aol.com*

12/9/98 09:19 *in reply to* ***Bruce***

I'll probly try the 100K pot trick in serial with the 47K resistor in the FB loop. But what did you mean by "bypass the pot lugs with a .001uF or .005uF cap"?? Do the caps "tune" the FB control?

I really don't like the bigger bottom end, I more enjoy a 3-D, complex, and harmonic midrange. I like to have harmonics popping out everywhere; I like chirps and squeals!

Mook

Re: Marshall Tone -- HOLD EVERYTHING

Bruce *missionamp@aol.com*

12/10/98 05:45 *in reply to* ***Mook***

Yes, in a way, that is what's happening.
It makes the feedback loop frequency selective.
The cap allows the higher frequencies to by-pass the pot.
Depending on what cap you choose, you'll effectivly make the feedback circuit dampen the gain at higher freqs but not the lows ... so it will sound more bassey, bigger and boomey...the high freq AC voltage is going around the pot, through the cap, while the low freq AC voltage is not getting through the cap and is attenuated by the pot.
It sounds like you might not like this one too much.
But, by all means, make up the adjustable feedback circuit so you can find out how much feedback voltage you like.
You can then jsut measure theoverall resistnace and solder the "120K" (or what ever) resistance right in.

Bruce

Re: Marshall Tone **MJ Harnish** *waldo@theshop.net*
12/7/98 18:01 *in reply to* ***Al***

Before trying to mod the amp I would try a new set of GOOD tubes and have them properly biased. As others have pointed out, many manufacturers bias the amps cold to make the tubes last longer.

If that doesn't do the trick, try your amp with a different cab. Greenbacks, V30s, classic Leads, etc. all sound different...

MJ

Re: Marshall Tone **Mook** *Mookie2112@aol.com*
12/8/98 10:28 *in reply to* ***MJ Harnish***

I'm using a Marshall slant cab dated 1977. It's a good cab.

As far as tubes: I like either the Seimmans (the real German tubes) or the Sovteks (EL34G I believe, which are a copy of the German tubes) the best. I have a good supply of the EL34G. I bias to about 35-40mA.

Right now, though, I'm trying out a pair of Teslas. I don't like them as much, but I'm just going to play them until they die.

I have some Svets on order. Perhaps them they come in, I might trash the Teslas.

Mook

Re: Marshall Tone
12/9/98 02:55 *in reply to*
Mook

Kevin Timm *guitaramp@sharq.net*
http://www.guitaramp.com/truckamps/

The teslas don't have a good top end for a bright amp like a marshall. The svets are much better
thanks
Kevin Timm
www.guitaramp.com/truckamps/

Re: Marshall Tone
12/9/98 09:30 *in reply to*
Kevin Timm

Mook *Mookie2112@aol.com*

I did a review of EL34s in my Plexi re-issue a few months ago. In addition, I tried a few 6L6s.

I found the 6L6s had the most midrange and bottom, the 5881 sort of had a "scouped" sound, and the tesla EL34s has the most top end. The sovtek el34G seems to have a nice strong midrange, too.

About the only thing I like the tesla el34s was clean playing - perhaps because of the strong top end that I perceived.

Mook

Re: Marshall Tone
12/9/98 15:21 *in reply to*
Mook

Richie *richiehall@wwd.net*

Mook; Have you tried the Svetlanas or the Sovtek EL34 wxt+ both these tubes are supposed to be designed after the mullard EL34,And the Sovtek will handle more plate voltage than most.When they first came out I was ordering some parts from them,and they asked me if I had tried them,They said if I didn't like them they would take them back!I have tried them in some amps and I think it is one of their best EL34,much better than the G,But I still like the Svetlanas best of all,and usally just get the sovtek EL34 wxt+ for amps that run high plate voltages. [Richie]

Re: Marshall Tone
12/11/98 12:23 *in reply to*
Richie

Liam *lph1@ukc.ac.uk*

Mook, I agree with Richie, but the Svetlanas are MUCH more like the Mullard tube than the Sovtek WXT+. They will also handle Marshall Plexi B+ without any problems.

The main difference I hear between these tubes is that the Svetlanas have a much better defined bass and mid. I'd strongly recommend you try these tubes.