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DISCLAIMER:
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The following thread describes the process I went through in building my very first Vibroclone amp (A "Vibroclone" is a reproduction of a blackface era Fender Vibroverb 1x15 amp.

Well, I finally bit the bullet and bought myself a chassis and speaker for beginning my own Vibroclone project.

Chassis:
69 Bandmaster Reverb w/ AA1069 circuit

Description by "Jack Price" of Priceamps:
The AA1069 circuit uses a 3-prong AC ground, 3-prong AC accessory outlet and a three way ground switch. These amps used the 5U4GB rectifier tube. Due to poor customer response to the AA768 circuit changes, CBS designers removed the cathode bias on this circuit but maintained the output tube balance control and ground suppressor caps. Wiring topology was still very similar to blackface era amps.

Speaker:
JBL D130 8 ohm - SN# 59084 - Needs to be reconed.

First order of business is deciding what kind of output transformer I'm going to use. The original BMR transfomer is 4 ohms, which isn't the proper impedance for an 8 ohm JBL D130. Additionally general opinion is that it's not sufficiently powerful enough to drive a 15" JBL properly. The original Vibroverb had a 40watt #125A7A OT.

From the people who have done this before me, opinions are that a stock 40watt 8 ohm replacement transformer doesn't have a sufficient iron core mass to offer clear bass response headroom. So, most have opt'ed to go with a blackface era 85watt TwinReverb Output transformer.

I'm not completely sold on the idea of using a TwinReverb OT yet, since the originals were running at 40watts and are pretty highly covetted for the tone they produce. So I'm going to ping some of the original Vibroclone builders on this topic before I commit to purchasing a replacement OT just yet.

Next is to have the JBL reconed:

For this task, I'm going to go with Paul Mastradone of Paradocs Specialties because he specializes in Vintage JBL reconing. An added benefit is that he lives in Beltsville Maryland, which is only a few miles from where I live.

NOTE: Although Paul Mastradone is a very good recone specialist, in the end I opted to go with **Weber VST** for my reconing since they were less expensive and also had the ability to remagnetize the original magnet back to new spec as well.

So far, this is what I've found out in regard to what the differences are between the BMR and the original Vibroverb. Feel free to fill in anything I've missed...

1 - Standard Blackface conversion.

2 - Output transformer (for 8 ohm load):
Use one with a multi tap secondary. These are usually the same size as the Super Reverb, which is the larger one. Theseusually have a 2, 4, and 8 ohm secondary so they can be used with amps such as the blackface

Bassman, Super Reverb, and an 8 ohm amp that never had a transformer this big.

3 - Tone controls:
Treble pot:
The Treble pot used was a 350k treble pot that is tapped at 70k.
Mid pot:
The blackface Vibroverb didn't have a Mid control pot. This control can either be eliminated or installed on the back panel or it can be left on the front panel.
Misc:
The Vibroverb has a .033 uF capacitor in the tone control circuit, same as early versions of the Super Reverb, but later Supers used a .022 uF cap.

4 - Feedback loop:
The feedback loop in the Vibroverb uses a 47 ohm resistor, while the other amps have a 100 ohm.

I just saw a "real" 64 Vibroverb and the stock output transformer (couldn't verify the date codes), appears to be "paper wound" transformer instead of the common blackface era metal sided OT's...?

NOTE: Found out that all Original Vibroverbs all came with paperwound OT’s

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Current status:

1. Have the 69 BMR chassis and it's ready to start the blackfacing. I'm also going to recap it while I'm in there. But recent research is making me debate the old Sprague or Orange drop cap effects on tone discussions. Once I decide which one I want, I'll order them and break out the soldering iron.

2. Have an 8 ohm JBL-D130 that's with Ted Weber as we speak for reconing. I reconsidered using Paul Mastradone of Bethesda's services after I found out that his cost for reconing was more than the cost of a mint original speaker ($125). Ted does the exact same job for $50.

3. Still trying to get the specs on the original Vibroverb output transformer. It appears that the originals used the tweed/brown era paper wound transformers, not the metal cased variety. But so far, I've found no one that carries an equivilent. Mojo has some paper wounds that are close, but no direct replacements.

4. Currently shopping faceplate vendors. Seems that getting a BMR faceplate made "without" a mid pot hole or associated silk screened numbers, is a little harder than I anticipated. The people I've talked with so far don't want to make custom faceplate. But I've got quite a few more people that I can ask before I give up on this one.

5. Found a couple cabinet maker sources, but I may end up going with my old standby Larry Rogers, since some of the others I've found have up to a 3 MONTH wait time on new orders. Larry's might cost a little more, but I know his turn around time is fairly quick.

Well, DRSPENCER has turned me onto the fact that Larry Rogers of Roger’s Amps in Charleston, South Carolina is apparently carrying paperwound OT's that are the exact spec of the original Vibroverb OT. (Just what I was looking for).

Here are the components I've determined that I'll need to change for the Vibroverb modification as well as blackfacing and recapping the amp. (This one has the infamous 'chocolate drop' caps in it).

Orange Drop 716P (or) Mallory 150 Caps:

1 - .047
5 - .1
2 - .02
1 - .01

Mallory Metal Can Caps:

1 - 25mfd-50v

Mallory formed Caps:

1 - .25-50v

Carbon Comp Resistors:

1 - 470k 1w
1 - 27k
2 - 220k
1 - 100k
1 - 82k

Bias Trim Pot:

3 pin Bias Trim Pot to replace the current 4 pin

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Oddities about this particular amp
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I haven't actually plugged the amp in yet, so I don't know if it has any stability problems, but it certainly has the looks of it from just inspecting the amp. I've found a couple wire groups that are spirally wrapped in purple wire which is soldered to the chassis at each end. (Presumably for calming down crosstalk). If I go so far as to rewire the amp with cloth solid core wire, it'll go then. But in the amp's current "rat's nest" lead dress configuration, it tends to help "tidy up" the CBS era plastic wiring a bit.

I've also found a .022 cap installed in parallel with the 10M resistor on the trem roach lead. (Must be some ticking going on with the trem from the crappy lead dress). But I think I can safely remove it and just set the leads correctly to fix this.

Finally, I found a "SECOND" metal can Mallory 50-70v cap tying the bias pot directly to ground. This on the same pin as the one that goes over on the fiber board leading to the Power Transformer. It's odd because it's not listed on the original schematic, so I don't know if it was added later or something the CBS soldering techs did to calm down problems caused by lead dress.

I recently ordered a 3 legged bias trim pot for my BMR to replace the existing 4 legged one.

The pot I received has a white plastic flatblade adjustment pole that stands up about 1/4" above the pot. And the legs (if you were looking at a clock) are positioned about about 2, 3, and 4'oclock.

The original trim pots for these amps had a "flush" black plastic flat blade adjustment pole. And the legs were positioned at about 2, 3, and 9'oclock.

I know this is nitpicking, but I'd like to use the period correct pot if I they're still being made. Anyone know of any sources for these?

NOTE: Found out that the new Fender parts for their reissue series blackface amps include period correct trim pots. So this is what I ended up using.

Started on the mods this evening...

1. Took close up pictures of all circuit board sections as well as the initial bias trim pot configuration.

2. Removed a dozen chocolate drop caps notating each one's position and value.

3. Removed parasitic supressor caps from each of the power tubes.

4. Found a 100k resistor off of pin #1 on the 12AX7 channel #1 tube that had a lead cut so short that it was just "touch soldered" to the connection point solder bubble instead of penetrating the eyelet. Removed and will resolder a new resistor properly later.

DISCREPANCY:

1. Found the ceramic disc cap connected to pin #2 of the 12AT7 phase inverter tube with a value of .01, but the schematic clearly shows this component is supposed to be a .001 on both the BMR and Vibroverb schematics...?

QUESTIONS:

1. Is the value discrepancy of the cap listed above valid or is this a schematic typo?

2. Why are the following caps "ceramic disc" caps instead of poly? Do they "need" to be ceramic?
a. .01 cap connected to pin #2 of the 12AT7 phase inverter tube.
b. .01 cap connected to pin #1 of the 12AX7 tremolo tube.

I'm not sure about the rhyme or reason behind when Fender did and didn't use ceramic caps...

After looking at some chassis shots of mid sixties Super Reverbs and even the Vibroverb, I found that each used ceramic caps in positions that were different as well as being different from my AA1069 BMR.

Most notably, the ceramic disc cap(s) connected to pin #2 of the 12AT7 phase inverter tube. In my amp those "three in a row" caps are poly-ceramic disc-poly. But in the Mid 60's amps, they used 3 ceramic caps in a row...?

I'm left wondering what the reason was for these composition and placement choices...?

This was "Lew Collins" spin on Ceramic Caps in Fenders...

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"I almost always pull the ceramic caps and replace them with either Orange Drops or (now that Bruce keeps them in stock) Mallory 150's. Fender's early use of the ceramic cap may have had to do with the ceramic caps smaller size...those tubular blue foil caps take up alot more space on the board.

I prefer the tone of Orange Drops or Mallory 150's in the .001, .01, .02 and .047 values. In the smaller caps, like the 250pf cap used as a treble cap in the tone circuit: the tweed Bassman and tweed Deluxe always used a silver mica there...never a ceramic disc cap. I generally prefer silver mica but some guys THINK they like the

ceramic disc better. To each his own, but Bill Carson says the silver mica cap (and fifties Jensen speakers!) is the key to great tone from those fifties Fenders.

As for the .001 or .01 cap on the input of he 12at7 phase invertor tube: the .01 value has a beefier tone as it allows more bass to pass thru it than the .001. I prefer the .01 value (.02 is stock in a tweed Bassman or Marshall!) as long as I don't hear the tone getting muddy. If I do hear it getting muddy, I use the .001.

I go by what I hear...Lew"
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It seems that my little AA1069 BMR must have been one of the first of the CBS era R&D amps, cause I'm still finding little mods that don't match up with the schematic... (The previous owner claimed it had never been modded).

The 'X' to 'X' wire connection that's supposed to go from pin #6 of the channel #1 7025 to the 'X' connection off of pin #2 of the 12AT7 phase inverter instead has been rerouted to the 'Z' connection off of the 3.3M resistor coming off of pin #7 of the 7025 reverb return tube...?

And at the moment I have no idea what this change is trying to accomplish...?

Ah... after looking through my list-O-mods... I think I've figured this one out. I think this is the equal weighting mod that allows you to have reverb and trem on both channels because it's also got the 'X' destination 220k resistors tied together with a small loop of wire.

Looks like the previous owner fibbed about being bone stock. I don't think this was a mod that was coming out of the factory even from the CBS techs...

Well, I just got my paper wound replacement Output Transformer from Rogers Amps, which is supposed to be an 'exact' replacement for the original Vibroverb. But whoa...! this baby is TINY in comparison to even the original BandMasterReverb OT.

I really didn't expect it to be so much smaller...?

Did a run through to check resistor values before I got started. I found 11 that were more than 10% off from their expected values. And I found another 7 that weren't right on the money. So since I'm doing a major rewire and rebuild on the amp anyway, I've decided to go ahead and replace all the one's I found that weren't correct.

Excessive? Maybe, but I'm going to desolder and reflow each circuitboard eyelet anyway, so it's not really creating any additional work. (The CBS tech or whoever it was that worked on it last wasn't the best at soldering technique...)

Additionally I removed the big 50-50 cap to ground from the bias pot. I removed all the little spiral wire wraps to ground. And I resoldered the PT ground to the chassis separate from the other transformer chassis ground like they were in blackface amps. (They were connected to the same solder point along with the cap that I removed).

These solder pads were a b*tch to remove. I didn't have a "big bertha" iron handy and even a 250watt gun iron

wasn't enough to allow the solder sucker to remove them. So I ended up just knocking them off with a sharp cold chisle. (When all else fails, use a bigger hammer)... As brutal as it sounds, they came off cleanly this way.

The 250watt iron was sufficient for soldering the pads in the new spots.

I can't believe I missed this... In my own defense, I've never owned a Band Master Reverb before, so I didn't know what the Output transformer was SUPPOSED to look like. Also, the person selling it to me said that it was bone stock, and the longer I own it, the more I realize this amp has seen more than a few mods.

After TREMO's suprise that the Rogers paperwound was smaller, and after closer inspection, I noticed that there are two mounting holes UNDER the existing output transformer as well as a shinier spot where the ORIGINAL transformer used to be mounted with TWO screws instead of the FOUR screw mount of the CURRENT transformer.

It seems that someone else already had the idea of beefing this amp up. The OT in there now has the Fender stamp and the Fender part number 022855(125A9A), which identifies it as either a Blackface Concert or Super or Super Reverb OT. It has the schumacher part number 606733, which verifies it's date as a 1967. The original OT for a BMR would have been Fender part number 022848.

Soooooo, I went back to my pictures of original Vibroverbs that I've collected and I compared the relative size of the Rogers paperwound to the original VV OT's. Using the size of a tube shield in the picture to get the width and height comparison, I popped a tube shield out of my super reverb, held it up to the Rogers OT, and they're EXACTLY the same size. So if you want an exact replacement VV OT, the Rogers model fits the bill and he's selling them at only $100.

Hmmmmm, now the dilemma... Should I leave the bigger 67 SR OT in there, or go for originality with the paperwound...? Either one is probably going to be sweet... But I don't have to decide this for a little while, I'm still working on the amp itself. So I'll let you guys know which way I go here in the thread.

I decided to go with the Roger's Paperwound Vibroverb Reproduction OT. (Installed it just a moment ago).

The biggest reason was because with my particular project, I'm going for a result that is as close as possible to Leo's original 1964 design right down to the lead dress.

The other reason, is because even though a blackface 67 Super Reverb OT is a tasty piece of hardware with lots of iron, it's only expecting to see a 2 ohm load. And my JBL-D130F is being sent back to me as we speak by Ted Weber reconed to the original VV value of  hms. So without re-reconing the speaker to 2ohms, I couldn't really use it anyway. (Maybe it'll find it's way into another project amp...)

One of the bennies of using the Vibroverb paperwound OT is that I can center the speaker in the cabinet like the original amps did. With the larger OT's you either have to offset the speaker in the baffle or you have to set the speaker screws at a nonstandard position to allow the corner of the OT to be over one of the speaker frame cutouts. That latter of which seems a little dicey when you consider you're putting the corner of a steel block that will heat up during operation, VERY close to the paper cone of your sepaker...

Additionally, it reduced the weight of the chassis "considerably", which I'm sure my back will appreciate once I start lugging the completed amp around.

The blackface era amp circuit cards had holes for either running wires between the circuit cards (under the components instead of on top of them ala silverface era). My particular circuit card had only 1 of these holes. So since I'm rewiring and redressing the circuit, I used the existing hole to determine the size drill bit to use. Then I went through and added all the holes that were on the layout diagram. This was fairly easy, quick, and clean.

The existing heater wire harness (the twisted one that daisy chains all the tubes together), was made of three different gauges and 4 different colors of wire between the start and end at the pilot lamp. So I removed it and clean up all the connections. I'm going to redo it in the standard twisted BF era green cloth wire. But for now I'm leaving it off because it will make getting to the other connections on the tubes (for replacing and redressing the wire), much easier.

I'm currently looking for the BF era location of the ground wire that comes from the doghouse of power supply filter caps underneath the chassis. It's not the one that is padded near the PT ground. It's the one that comes from the center cap on the choke side of the card.

On the silverface era amps, they ran this down through one of the rubber grommets opposite the other ground spoken of above. Then they run it to the ground pad down at the power tubes. This doesn't seem like a very efficient place to run the wire, so I'm going to find out where they placed it in BF amps. (I've seen BF chassis and it's not in the location that the silverface amps used, but I can't find where it DID go from the photo's...)

I found a schematic from Jack Prices website "priceless amp restoration", which outlined what the wiring scheme was in BF era amps on the Filter cap board. It turned out that the reason why I wasn't seeing the extra wires on pictures of BF era amps, is because they weren't there.

The BF filtercap board only sends "2" wires down to the chassis as grounds. One for the 70mfd pair which grounds itself near the PT center tap ground. And the second ties all the 20mfd cap grounds together and sends the ground wire down from the last one in the line to a ground pad under the normal channel treble pot.

The SF filtercap board sends down "4" grounds! The first is the one from the 70mfd pair which also got grounded near the PT center tap. The other three were individual grounds coming off each 20mfd. One went to the normal channel treble pot ground pad, one when to power tube #2's ground pad, and the third one went to the ground pad under the vibrato channel's bright switch.

Going along with my idea to make my project as close as I can to the original, I rewired the filtercap board grounds to the blackface scheme.

Well it's going slowly, but the more I do the faster I'm getting. Over the holiday weekend I got an entire day to work on the amp. For no particular reason, I'm working from the normal channel side of the board toward the power transformer side. But the results were that I finished "half" of the circuit card, stopping right where the Vibrato pedal wire connects to the circuit card.

As I said before, I'm using cloth covered wire that's the same spec and color as called for in the schematic. And using a picture of a real 64 Vibroverb chassis has given me a secondary confirmation source as to what wires were twisted, what wires were bare, and what wires were dressed under the circuit board via the dressing holes.

I'm also unsoldering each component, removing all the eyelet solder, flattening the component leads, and then redressing those leads. All of which makes for much neater and closer to the board mounting. Additionally, I'm cleaning the board and eyelets as I go of old solder rosin, solder bits, and any other schmootz with a wire solder brush and alchohol.

The results so far are pretty dramatic in that the dressing holes GREATLY reduces the clutter of wires going over top of the components. Also, twisting the proper pot control wires together and dressing them like they were originally intended to be dressed is a LOT cleaner than the silverface mess that was in there.
(ie, the bunches of loosely grouped wires with purple twists of grounded wire are gone and so is the heavy black wire that used to drape across the components.)

Also, remounting the components allows everything to lay flat and side by side on the circuit card vs. the substandard assembly that was done by the CBS era soldering techs.

TIP:

(You guys asked me to note anything I ran into that might help following builders do this more easily).

1. Leave the bare ground wires from the circuit card to the ground pads unsoldered until you've completed everything else. If you make them tight like I did, it greatly reduces your mobility in getting wires into the dressing holes and under the circuit card.

2. Regarding the .1 Cap above the reverb return 7025, which is connected to the "Y" wire (The "Y" is notated on the schematic in a little box). This large cap size is a little tricky to get mounted close to the board in the small location where it's mean't to be installed. I came up with a creative bend in the leads which dresses them similar to the way leads exit an orange drop cap (only closer to the cap). This allowed me to tilt the cap to one side, solder it in, and then rock it into place over the eyelets.

"If component height isn't an issue, you can just mount whatever cap type you use a quarter inch or so above the board. I just wanted to keep it as close to the board as all the rest. That's why I took a little extra time to figure out a different way to do it."

3. The resistor/cap pairs above the Reverb Send and Return tubes both have an additional resistor network connected to the top of the grouping. Being that this eyelet is already overcrowded with 4 components in it. I found that connecting the bare ground wire and the additional resistor to the adjacent open eyelet instead of directly to the top of those resistor/cap pairs allows for more breathing room. Then I used a piece of component lead to connect the two eyelets together and essentially form the same circuit.

I'm assuming that this is what that adjacent eyelet was for, but for some reason, the CBS techs just stuffed everything they could into the resistor/cap eyelets and then just soldered the ground and additional resistor leads to the top of the inserted leads. (very messy).

Stay Tuned...

Well, I'm getting closer to Nirvana... I'm down to just a few parts that I still need, period correct bias trim pot with only 3 leads (on the way), a couple caps I thought I had but didn't (on the way), and of course the cabinet. I also need to bypass the ground switch and replace the 2 prong power cord with the correct gray replacement cord. (Might as well be gray, since I have to replace it anyway...)

Regarding the cabinet, the amp will be temporarily be residing in a real blackface Super Reverb cabinet that I aquired, which already had a 1x15" baffle mounted in it. After I get my Vibroverb spec cab built, the guts of my 76 Super Reverb will get a new home in the BF SR cabinet complete with a new baffle made to spec.

New Discoveries...

1. In my quest to make the amp just like the layout, I put all the dressing holes in the circuit card, right where the layout diagram calls for them. But after doing some comparison with real 64 Vibroverb circuit images, there are a couple that didn't get used, and the reason for it was pretty obvious. (The wiring actually looks cleaner without them). Those two are just to the right of the "trem roach". One is between the two 1M resistors and the other is just below that between the .02 and .01 caps. In both cases, the wiring looks cleaner (and was done this way by Fender), if you just pull the wire through the eyelet of the 1M resistor leg and the .01 cap eyelet respectively. So if or when I do this again, I'll just leave those holes out. But for now, they're really not that noticeable.

2. The brown wire that comes from the "doghouse" Power Supply Filter Caps just above the 12AT7 and connects to the 100k 82k resistor junction is dressed above the board in the layout. I found that it's easily dressed below the board in the same hole for the wire that comes of the bias trim pot. This isn't the way it was done on the originals, but in this one case, it didn't seem to make sense for it to be the only wire dressed across the board components on the entire card. If it causes any problems, I'll let it be known.

Ok, the rewiring has been coming along slowly but surely. Having to reorder wire 3 times didn't help, but I had no idea how much yellow wire was actually necessary to rewire an entire chassis. To save others from a similar

fate and just in case I want to do this again to another AB763 amp, I'll post the totals of each color wire when I'm completely done.

The only thing I have left in the rewiring is the heater wires to each tube which should be a breeze as long as I don't run out of green...

Other than that, the only things I need are speaker wire a foot switch, speaker wire & phono plug, reverb cables, and a tank bag.

The one nonstandard thing I'm going to use is a 3 spring reverb pan vs. the stock 2 springer that came in the originals. This is just because I happen to have a new 3 spring laying around. If I don't like it, I can always change it out.

Well, I've found that the most laborious part of this whole project was the waiting for all the individual bits and pieces that I didn't know I needed, but then had to order from a multitude of sources, or beg borrow & steal from friends...

In the interest of keeping a record of those sources and friends, I'm going to start keeping the list here. That way when I get my own Vibroclone page up, I can include everyone that helped along the way. So if you've been one of those helpful people and you don't see your name here or the information is incomplete, don't feel slighted, there have been lots of you. Just email me and I'll update the list.

John Stokes(Tremo) - Advice - No Website
Rob Livesy - Advice - www.ma.umist.ac.uk/rl/amp...clone.html
Larry Williams(SG) - Advice & Parts - pub58.ezboard.com/bampworkshop
Shea Moxon(Shea) - Advice & Parts - No Website
Ted Weber - Advice & Parts - www.webervst.com
Lord Valve - Advice & Parts - lord-valve.freeyellow.com/
Mike - Advice & Parts - tonezoneonline.com
Michael Clark - Parts - www.clarkparts.net
Vibroworld - Parts - www.vibroworld.com
Gil Ayan - Parts & Advice - home.earthlink.net/~ayan/
Ned Carlson - Advice - www.triodeelectronics.com
Larry Rogers - Parts - home.onestop.net/rodgersamp/
Angela Instruments - Parts - www.angela.com/

Well, I've got the amp completely rewired, and now I'm waiting on the amphenol 3 prong utility outlet I ordered from Vibroworld so I can install the power cord.

I also found out that the blackface era reverb cables were not like the gray plastic silverface type. They were exposed metal braid wire, which I wasn't having much luck in finding. (Everyone only seems to carry the clear plastic coated braid cable).

Then I remembered Willie Whitaker aka 'Lord Valve' made me up a set of reverb cables for my 66 reverb unit a few years back. He was the only person then that I could find with the right cable. So I gave him a ring and sure enough he still had the right cable in stock.

The next hurdle was to find out what the length was supposed to be for a 1x15 Vibroverb, Willie didn't have the information in house. So I contacted Jack Price of Priceless Amp Restorations and he gave me the skinny... "They're the same as the Twin and Pro Reverb: 48" and 36"

This makes sense since the Twin Reverb cab is 20x26 and the Vibroverb cab is only slightly smaller at 19x25.

Oh.... I've also got a set of TungSol 5881's and a Mullard GZ34 on the way for power. And I already have a stock of RCA 12AX7's and 12AT7's that I bought from KCA Tubes a couple years ago. So I'll be ready to tube up shortly.

I also ordered my cabinet from Larry Rogers, complete with tilt back legs. And I ordered my foot switch and some new knobs from Angela's Instruments.

The only piece I'm missing that isn't critical from an operational aspect, but "is" from a detail oriented cosmetic aspect, is the round plastic phono plug for the speaker wire... Nitpicking I know, but the devil is always in the details... So if anyone has one of these in their junk drawer that they want to part with, feel free to shoot me an email.

Well... The problem I've been battling since the amp was rebuilt has been found. It turned out that I had accidentally put a 470k ohm resistor into the NFB loop where there was supposed to be a "47" ohm resistor.

NOTE: This was causing the amp to oscillate when switched on until it was corrected.

Normally I'd be kickin myself for wasting all this time over something this simple. But the plus side of all this was that it forced me to REALLY learn how to evaluate and troubleshoot an amp from start to finish. The last couple weeks of research and testing has greatly increased my knowledge of Leo Fender's AB763 design methodology. So in the end it makes the amp just that much sweeter.

All I need to do now is get a 47 ohm resistor (I used a 100 ohm for now) and bias the amp. Then I can pop it all into my new and VERY well done cabinet from Rogers Amps of South Carolina.

Was your cabinetmaker the best price you found or was he the quickest turnaround time?

I've had **Larry Rogers** do lots of work for me in the past and I've always been EXTREMELY pleased with the quality of his work and the attention to detail he includes. So that was a plus in his favor. But out of everyone I checked with, he was the only one that could turn the job around in 3 weeks. Everyone else was quoting 8 to 12 weeks !!!

For you OPT choice did any other suppliers also have the one you chose?

I again chose **Larry Rogers** because he was the only source I could find that carried an 8 ohm paperwound "exact" duplicate of the original Vibroverb OT's. There were lots of aftermarket models, but I couldn't find anyone else that had one that matched what the original's had. (I also visually verified that these are correct in outward detail against a real 64 Vibroverb).

What kit does Weber use on the D130 recone? I don't remember reading if you went with the aluminum or paper dust cover?

Ted Weber had his own custom run of D130F style coning paper made for exactly this purpose. Unless you find an NOS kit, JBL DOES NOT make these anymore. So if someone tells you they'll recone it for extra money with a real JBL kit, be wary...

Despite all the controversy over paper or aluminum dust caps, I went with the aluminum dust cap since that's what the originals came with. The aluminum dust cap does more than just add high end response, it also acts as a heat dissipator for the voicecoil when the speaker is being driven at stage volumes (something the paper dust cap won't do). I may change my mind at a later date, but for now I'm making my Vibroverb original down to the very last detail.

Well, I finally mounted the chassis in the new cabinet and it looks great. (Website coming soon...)

I thought I'd add a note here just so other people will know what I didn't...

While the BMR chassis is the right size, the mounting straps for a BMR are shorter than that of the Vibroverb. So I actually had to put screw holes in the proper places so I could bolt it up in the new Vibroverb Cab.

The holes closest to the faceplate of the amp are in the right location. The one's that needed to be added were at the rear of the chassis. The small grooves in the side chassis wall correspond to the approximate location of where the screws need to be.

I positioned the holes on mine by just using a chassis strap as a template and lining it up with the front hole. The holes for the screws needed to be made with an 11/64th's drill bit.

Just one of those little gotcha's...
