TECH NOTES

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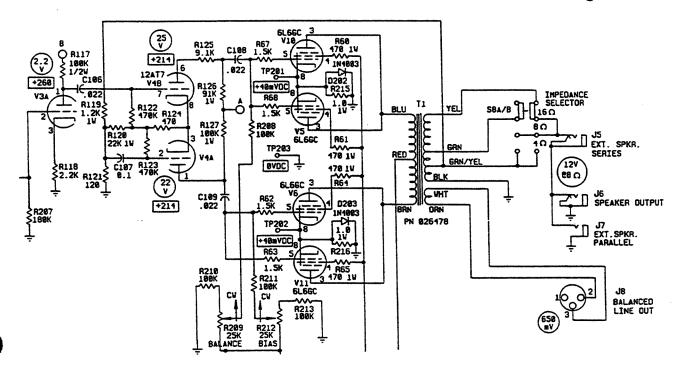
*** THE TWIN ***

As you likely know, The Twin uses 1.0 ohm 1 watt resistors in the cathode circuit of each pair of 6L6GC output tubes to permit measuring and setting the bias from rear panel test points. Thus setting the bias control to produce 40 millivolts across the 1 ohm equates to 40 milliamps of idle current, the proper biasing.

There are certain conditions of 6L6GC tube failure that can cause excessive current through these 1 ohm resistors resulting in heat build-up enough to char the P.C. board even though they are flameproof type resistors.

An engineering change was issued by R&D to add diodes across these resistors to protect them in the event of 6L6GC failures of this kind. This change should be made under warranty to The Twin whenever one is in your shop for service.

Add a 1N4003 diode across 1 ohm resistor R216 and a 1N4003 diode across resistor R215. Refer to diodes D203 and D202 in figure 4:



*** FIGURE 4 ***

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*** THE TWIN (CONTINUED) ***

Position the diodes so that the cathode of the diode connects to the ground side of the resistor and the anode of the diode connects to the side of the resistor that connects to the cathode of the 6L6GC tube. You may order 1N4003 diodes under Fender part number 064089.

*** WARRANTY CLAIMS AND RETURNS ***

Lately we've been receiving warranty claims lacking information. Please include a copy of the owners sales receipt and enter all of the required information.

It is not necessary to get a return authorization (R.A.) number to return parts for credit. R.A.'s are used for finished goods items. However, when you return parts for credit provide backup information to explain the facts. Do not return any items unless you provide all the facts.

We feel this is entirely reasonable and ask that you comply. Your cooperation is genuinely appreciated.

*** REGIONAL CENTER RELOCATED ***

Our western regional service center moved to a new location. Paul Morte Technical Services formerly shared a building with Soest Guitar Repair at 870 North Eckhoff St. in Orange, CA. Both have moved to the new locations listed here:

PAUL MORTE TECHNICAL SERVICES 946 N.MAIN STREET ORANGE, CA 92667 PH. (714)532-9540 FAX (714)532-9580

SOEST GUITAR REPAIR 760-D N.MAIN STREET ORANGE, CA 92668 PHONE (714)538-0272

*** THANKS SERVICE SOULS ***

Thank you for being part of the Fender/Sunn team and for all your help and support during this past year, 1990. It is our sincere, strong desire that you all have wonderful holidays and happy, prosperous times ahead in 1991.

Good Servicing,

*** W.E.T. ***