MUSIC MAN, INC. 1338 State College Parkway P.O. Box 4589 Anaheim, California 92803 (714) 956-9220 Telex 692-397

SERVICE BULLETIN #5

RF INTERFERENCE MODIFICATIONS

2 Channel Amplifiers

65/130 Reverb Models Only:

- 1. (a) Install solder lug to chassis with output transformer mounting screw (located below footswitch jacks)
 - (b) Solder .0015mf ceramic capacitor from solder lug to footswitch jack ground lug.
 - (c) Install solder lug onto power transformer mounting bolt with extra kep nut.
 - (d) Solder .05mf ceramic capacitor from solder lug to ground eyelet on rectifier board (corner eyelet).
- 2. (a) Install a solder lug on the main PC board under the bottom center board mounting screw.
 - (b) Solder a .0015mf ceramic capacitor from the solder lug to the reverb spring jack ground. This can be done by soldering to the top lead of 1K resistor near the return jack

65/130 All Models:

- 1. Check for a .05mf ceramic capacitor installed from power supply ground (bottom right corner eyelet) to chassis ground (solder lug under corner PC board mounting screw). If it is missing, install one.
- A very successful deterrent to RF is replacing the LF351H manufactured by National Semiconductor and others. These do not rectify RF. You may get by just replacing the input amplifiers, the reverb spring amplifier and the summing stage.

If the bifet ICs are unobtainable, a temporary solution would be to install 100pf capacitors from pin 2 to pin 3 of various ICs. This is a partial deterrent to RF especially when applied to the input amplifiers. A .001mf ceramic can be installed on the reverb return spring amplifier (pins 2 and 3).

SERVICE BULLETIN #5 cont.

4. Installation of .1mf ceramic capacitors from supply lines to ground will help eliminate RF and voltage spikes from appearing on the supply lines.

RP - RD Series

All Models

- 1. (a) Install a solder lug on the main circuit board under the center board mounting screw.
 - (b) Solder a .0015mf capacitor from this lug to circuit board ground (trace surrounding RCA phono jacks).
- A very successful deterrent to RF is to replace some of the LM1458N ICs with a bifet type. These do not rectify RF. A suggested replacement is a National LF353N. RCA, Texas Instruments and others may have a similar bifet replacement that is applicable. Possible replacement areas are the input stage, the hi-gain stage and the reverb stages.
- 3. Texas Instruments Bi-Fet 10 # TLO-72 is available from Music Man as a sub for LT-353N.

RF MODIFICATION DRAWING

