



# WURLITZER SERVICE SLANTS

YOUR QUESTIONS OR COMMENTS ON "SERVICE SLANTS"  
ARE WELCOME AT ANY TIME

WURLITZER SERVICE DEPT., NORTH TONAWANDA, N. Y.

**SUBJECT:** Low Frequency Hum .

**AFFECTING:** Wurlitzer Statesman 3400, 3410 and 3460 Phonographs .

**COMPLAINT:** Low frequency hum audible on some Phonographs while in "at rest" position .

**MANUFACTURERS CORRECTION:** To prevent the possibility of hum in future equipment, we are replacing Resistor R-29 (8 ohm - 5W) with a 25 ohm - 5W resistor .

**FIELD CORRECTION:** It is suggested that if this complaint is apparent, remove Resistor R-29 (8 ohm - 5W) and replace with a new 25 ohm - 5W resistor . This resistor may be purchased from our Parts Department under Part Number 74817-2 .

Refer to Figures 1 and 2 for voltage changes resulting from replacement of Resistor R-29 .

TEST POINT	D.C. VOLTAGE	TEST POINT	D.C. VOLTAGE
① ⑦	0.9	Emitter Q-8 and Q-9	10.0
② ⑧	0.4	A and B Bias	10.0 <sup>ca</sup>
Collector Q-1 and Q-2	1.9	⑬	21.0
③ ⑨	10.0	⑭	0
Emitter Q-3 and Q-4	1.3	⑮	21.0
④ ⑩	0.65	Emitter Q-5	21.0
⑤ ⑪	9.0	High side of R-26 (on Filter Capacitor 2000 MFD)	25.0
⑥ ⑫	0.06		

Figure 1. D.C. Voltage Changes Resulting From Replacement of R-29 .

**NOTE:** Circled test points are the same as those found on the 550 Amplifier Schematic Diagram in the 3400 Service Manual .

Frequency - 1000 CPS Tones - Maximum Balance - Mid - Position	①	②	③	④	⑤	⑥	⑬	⑭	⑮	Driver	Output
	⑦	⑧	⑨	⑩	⑪	⑫		V.D.C.	V.D.C.	To Load	A to G
Condition #1 5 mv Input or Use 1 Volt and Attenuator #1 Loudness Full ON	—	—	—	—	—	—	—	—	+21 V. D. C.	0.135	—
Condition #2 Same as Condition #1 except wires removed from board to A.F.B. and B.F.B. (no feedback)	—	—	—	—	—	—	—	—	+19.0 V.D.C.	X	X
Condition #3 400 mv input or use 1 Volt and Attenuator #2 Loudness OFF (ALC Test)	—	—	—	Loudness Turned OFF			+1.35 V.D.C.	+21.0 V.D.C.			

Figure 2. A.C. Voltage Changes Resulting From Replacement of R-29.

NOTE: Circled test points are the same as those found on the 550 Amplifier Schematic Diagram in the 3400 Service Manual.