

Second

ELECTRONIC MUSICAL INSTRUMENT

- JC-60 Serial number 512400 and higher
- JC-80 Serial number 510950 and higher
- JC-120 Serial number 510850 and higher
- JC-160 Serial number 512500 and higher

SERVICE NOTES

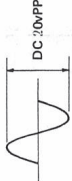
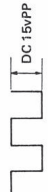
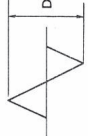


Provisional
Printed in Japan



WAVE FORMS

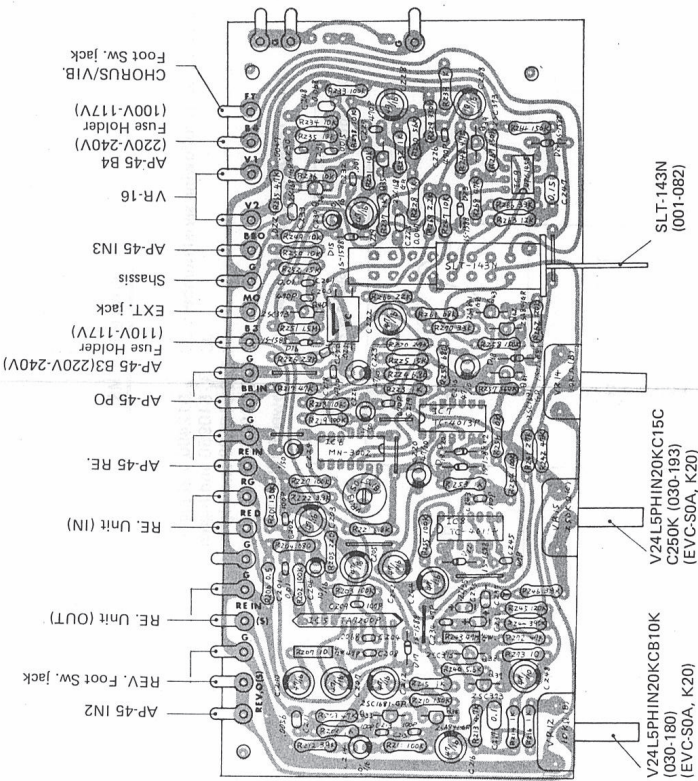
Applicable to following serial number: JC60 512400 and higher
 JC-80 510950 and higher
 JC-120 512500 and higher
 JC-160 510850 and higher

Measurement Condition: at the rated output Power 60W(22V)

Description	Shape & Amplitude	Frequency
Vibrato O.S.C	 DC 20VPP	(1.9 Hz - 11 Hz)
Clock O.S.C (Vibrato)	 DC 15VPP	52kHz-71.4kHz
Chorus O.S.C	 DC 26VPP	(1.24Hz)
Clock O.S.C (Chorus)	 DC 15VPP	45 KH - 130 KH
BBD output (18dB/OCT filtered)	 AC 3.4VPP	1 KHz

JC-60 JC-80

ET-6 (151-006) PCB 052-199 JC-60 serial NO. 543150 and higher
 JC-80 serial NO. 541050 and higher



ET-6 parts modification

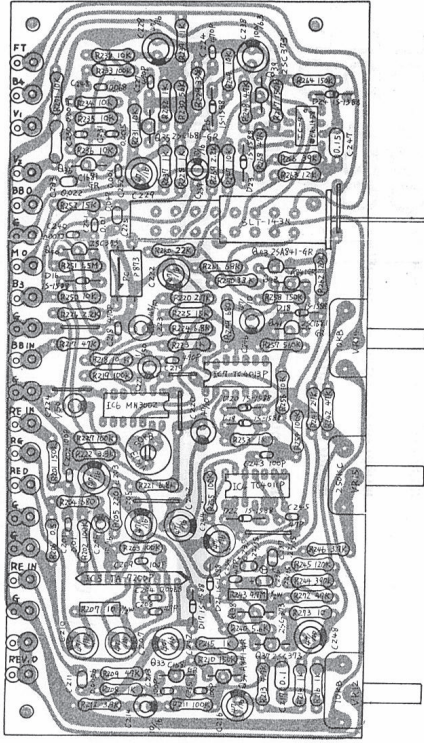
JC-60 532950	R266			
JC-80 530950	39K → 33K			
JC-60 543150	pc board	C240	R271 C249	
JC-80 541050	052-190A → 052-199	0.0022μf → 470pf	omitted	
JC-60 573650	D21	C250	C238	
JC-80 571150	1S1588 omitted	0 → 0.022μf	100μf 6.3V → 10μf 16V	

AP-45 parts modification

JC-60 532950	Q16, Q19	R101	R108	C135
JC-80 530950	2SK30A(GR) → 2SK30A(Y)	47K → 82K	4.7K → 5.6K	3.3K → 8.2K
JC-60 543150	C117			0.0047μf → 0.001μf
JC-80 541050	100μf-50V → 470μf-35V			
JC-60 563450	R142, R145, R146, R148, R151	R149, R116		
JC-80 561150	1/4R → fusing resistor	1/4W → 1/2W		

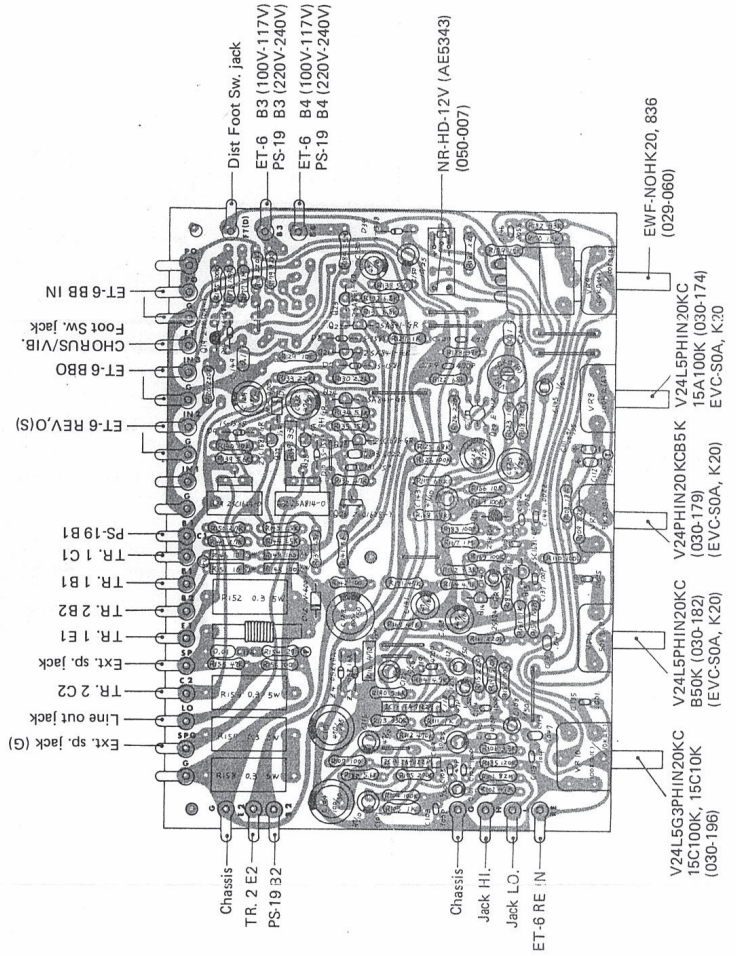
July 20 1977

ET-6 052-190A (parts side) JC-60 serial NO. 512400 — 533149
 052-182A (pattern side) JC-80 serial NO. 510950 — 531049



The difference between ET-7 and ET-6 is only on value of C211. Both can be interchangeable by replacing C211 of 0.022 (ET-7) or 0.0056 (ET-6). Two of these ET-6's are interchangeable. Shown on the left is electrically superior, when replacing, ET-6 on the left is better recommended.

AP-45 (141-045) PCB 052-189A (parts side)
 052-181A (pattern side)



OVERALL CIRCUIT DIAGRAM
JC-60 serial NO. 512500 and higher
JC-80 serial NO. 510850 and higher

