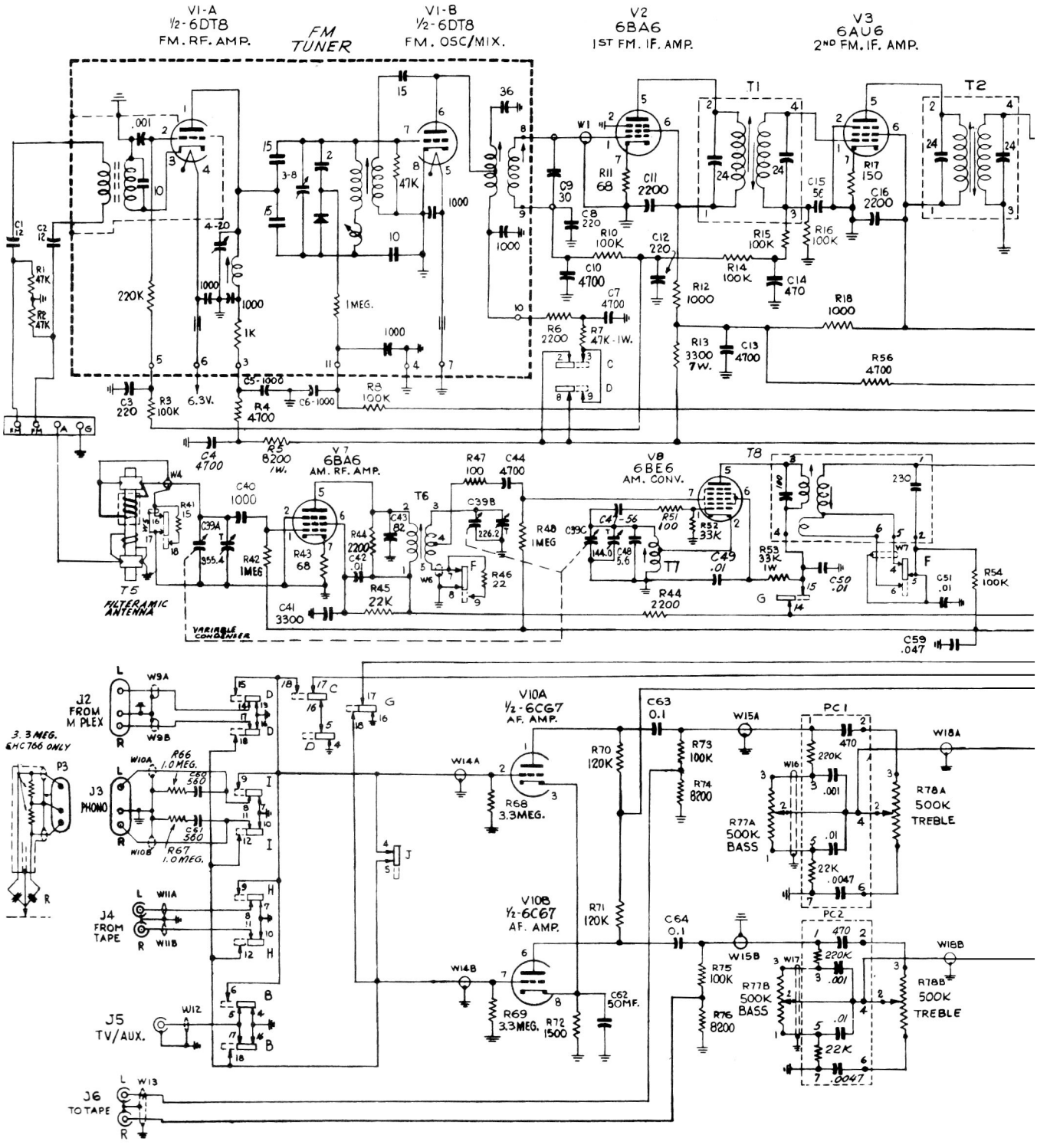
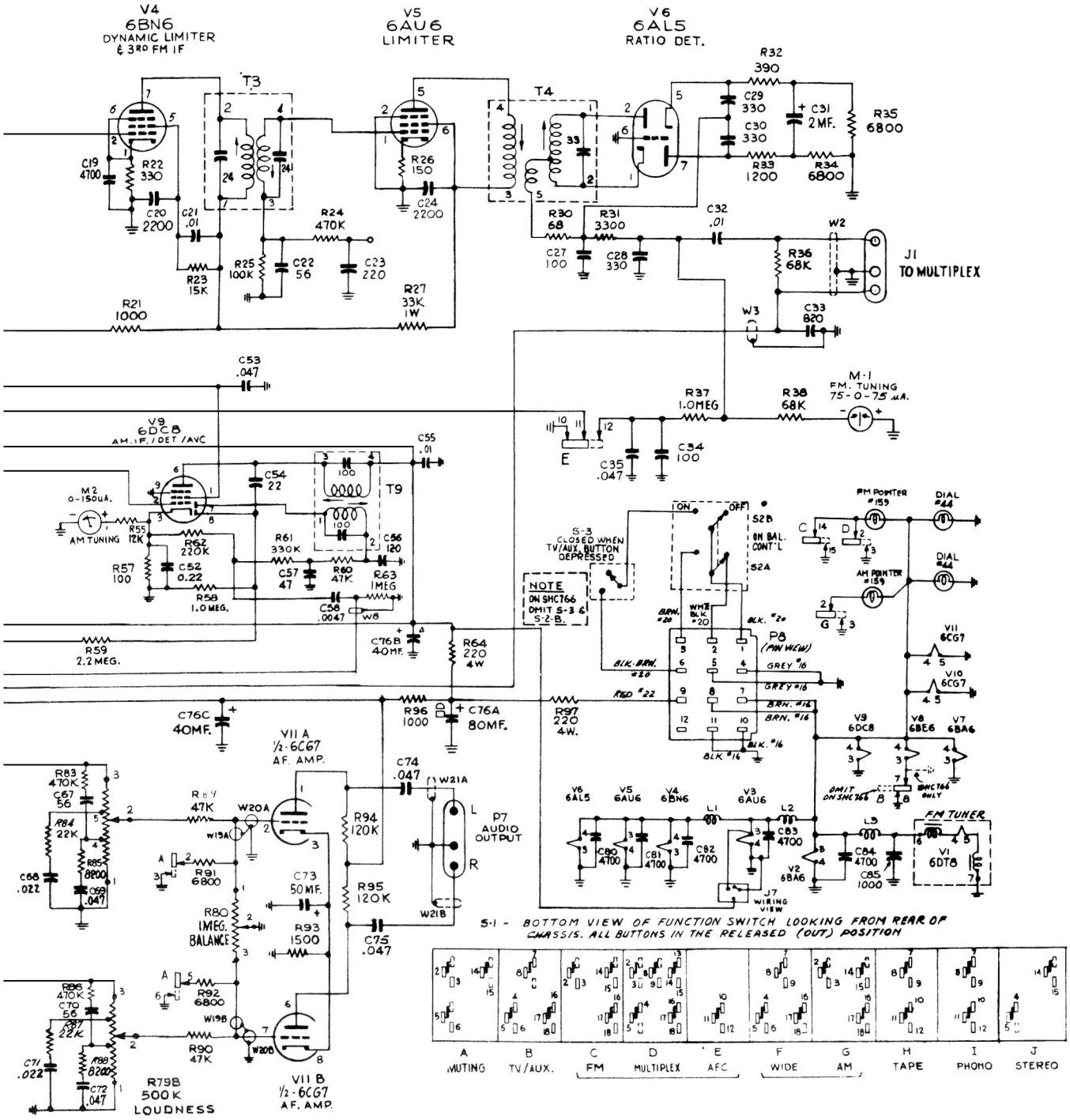
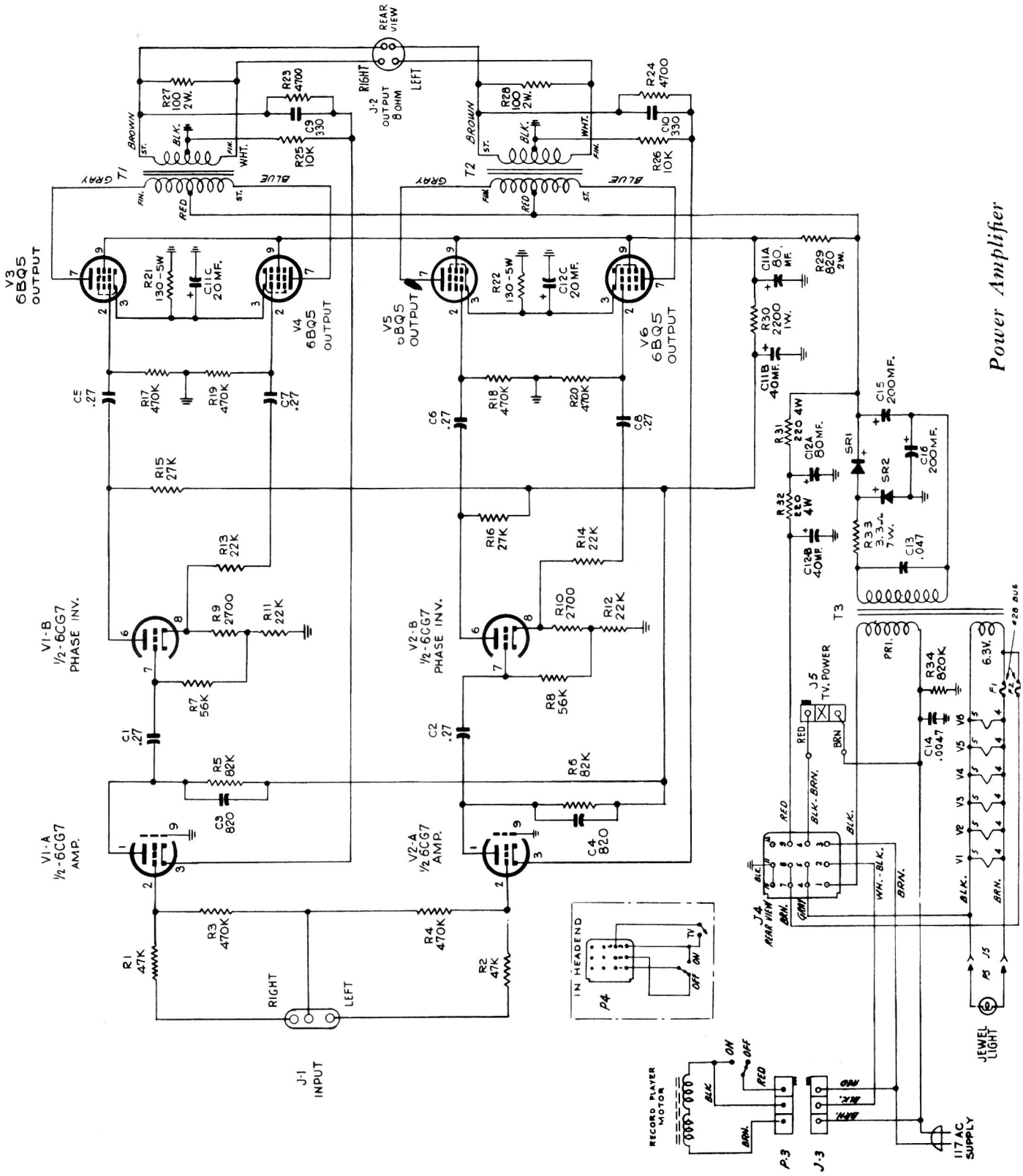
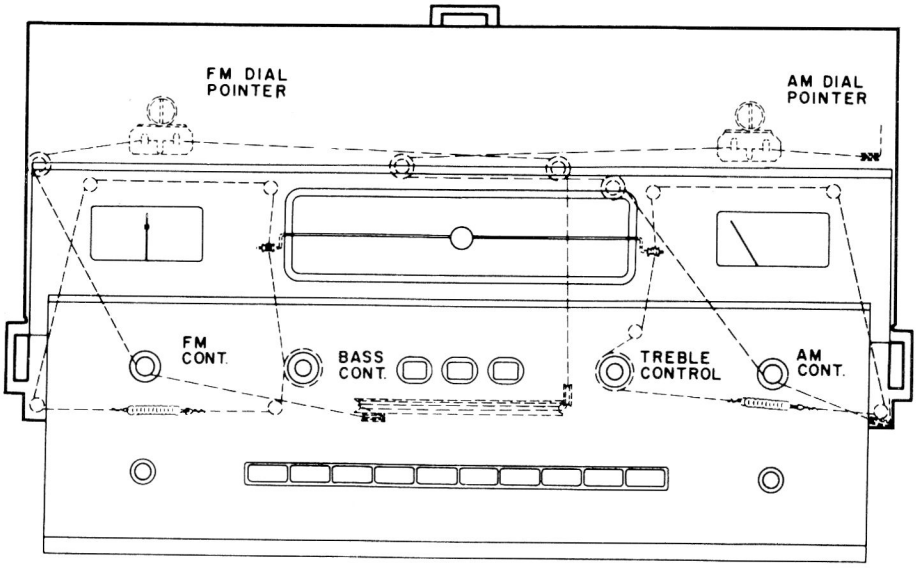

V1-A
½-6DT8
FM. RF. AMP.
FM TUNER
V1-B
½-6DT8
FM. OSC/MIX.
V2
6BA6
1ST FM. IF. AMP.
V3
6AU6
2ND FM. IF. AMP.
T1
T2
V7
6BA6
AM. RF. AMP.
V8
6BE6
AM. CONV.
T8
T6
T7
T5
FILTERAMIC ANTENNA
VARIABLE CONDENSER
V10A
½-6CG7
AF. AMP.
V10B
½-6CG7
AF. AMP.
J2
FROM M PLEX
J3
PHONO
J4
FROM TAPE
J5
TV/AUX.
J6
TO TAPE
3.3 MEG. EHC766 ONLY
P3
PC1
PC2
R78A
500K
TREBLE
R77A
500K
BASS
R78B
500K
TREBLE
R77B
500K
BASS
6.3V.

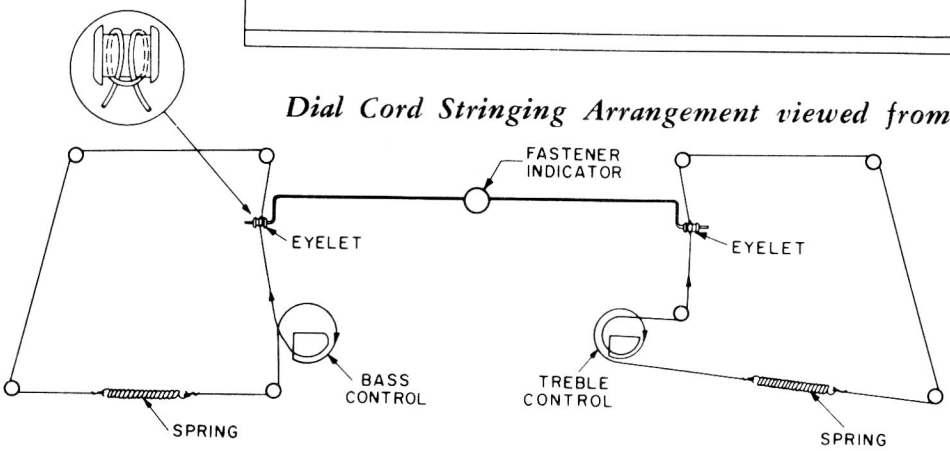

V4
6BN6
DYNAMIC LIMITER
& 3RD FM IF
V5
6AU6
LIMITER
V6
6AL5
RATIO DET.
T3
T4
R32
390
C29
330
C30
330
C31
2MF.
R35
6800
R33
1200
R34
6800
C19
4700
R22
330
C20
2200
C21
.01
R23
15K
R24
470K
R25
100K
C22
56
C23
220
R26
150
C24
2200
R27
33K
1W
R21
1000
R30
68
C27
100
R31
3300
C28
330
C32
.01
R36
68K
W2
J1
TO MULTIPLEX
W3
C33
820
C53
.047
M-1
FM. TUNING
75-0-75 μA.
R37
1.0MEG
R38
68K
E
C34
100
C35
.047
V9
6DC8
AM. IF. / DET / AVC
M-2
0-150μA.
AM TUNING
R55
12K
R62
220K
R57
100
C52
0.22
R58
1.0 MEG.
C54
22
T9
C55
.01
R61
330K
C56
120
C57
47
R60
47K
R63
1MEG
C58
.0047
W8
R59
2.2 MEG.
C76B
40MF.
R64
220
4W
NOTE
ON SHC766
OMIT S-3 &
S-2-B.
S-3
CLOSED WHEN
TV/AUX BUTTON
DEPRESSED
S2B
S2A
ON BAL.
CONT'L
ON
OFF
P8
(PIN VIEW)
FM POINTER
#159
DIAL
#44
AM POINTER
#159
DIAL
#44
V11
6CG7
V10
6CG7
C76C
40MF.
R96
1000
C76A
80MF.
R97
220
4W.
V9
6DC8
V8
6BE6
V7
6BA6
OMIT
ON SHC766
SHC766
ONLY
V11A
½-6CG7
AF. AMP.
R83
470K
C67
56
R84
22K
C68
.022
R85
8200
C69
.047
R89
47K
W20A
W19A
R91
6800
R80
1MEG.
BALANCE
R92
6800
W19B
R90
47K
W20B
C74
.047
W21A
R94
120K
C73
50MF.
R95
120K
R93
1500
C75
.047
W21B
P7
AUDIO
OUTPUT
L
R
R86
470K
C70
56
R87
22K
C71
.022
R88
8200
C72
.047
R79B
500K
LOUDNESS
V11B
½-6CG7
AF. AMP.
V6
6AL5
V5
6AU6
V4
6BN6
V3
6AU6
V2
6BA6
L1
L2
L3
C80
4700
C81
4700
C82
4700
C83
4700
C84
4700
C85
1000
J7
WIRING
VIEW
FM TUNER
V1
6DT8
5-1 - BOTTOM VIEW OF FUNCTION SWITCH LOOKING FROM REAR OF CHASSIS. ALL BUTTONS IN THE RELEASED (OUT) POSITION
A
MUTING
B
TV/AUX.
C
FM
D
MULTIPLEX
E
AFC
F
WIDE
G
AM
H
TAPE
I
PHONO
J
STEREO

AM-FM Tuner

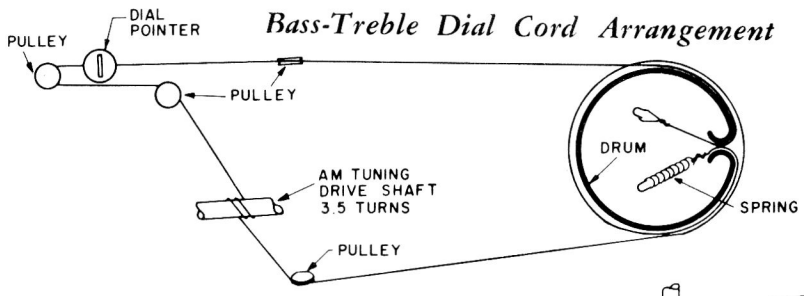

Power Amplifier
REAR VIEW
J-2 OUTPUT 8 OHM
RIGHT
LEFT
R23 4700
R24 4700
R27 100 2W.
R28 100 2W.
C9 330
C10 330
R25 10K
R26 10K
T1
T2
BROWN
BLK.
WHT.
BLUE
GRAY
RED
V3 6BQ5 OUTPUT
V4 6BQ5 OUTPUT
V5 6BQ5 OUTPUT
V6 6BQ5 OUTPUT
R21 130-5W
R22 130-5W
C11C 20 MF.
C12C 20 MF.
C11A 80 MF.
R29 820 2W.
R30 2200 1W.
C11B 40MF.
C12A 80 MF.
C12B 40MF.
R31 220 4W
R32 220 4W
R33 3.3K 7W.
C13 .047
C15 200MF.
C16 200MF.
SR1
SR2
C5 .27
C7 .27
C6 .27
C8 .27
R17 470K
R19 470K
R18 470K
R20 470K
R15 27K
R16 27K
R13 22K
R14 22K
R9 2700
R10 2700
R11 22K
R12 22K
V1-B 1/2-6CG7 PHASE INV.
V2-B 1/2-6CG7 PHASE INV.
R7 56K
R8 56K
C1 .27
C2 .27
R5 82K
R6 82K
C3 820
C4 820
V1-A 1/2-6CG7 AMP.
V2-A 1/2-6CG7 AMP.
R3 470K
R4 470K
R1 47K
R2 47K
RIGHT
LEFT
J-1 INPUT
IN HEADEND
P4
TV
ON
OFF
J5 TV. POWER
RED
BRN
BLK-BRN.
BLK.
WHT.-BLK.
BRN.
J4 REAR VIEW
T3
PRI.
6.3V.
R34 820K
C14 .0047
V6
V5
V4
V3
V2
V1
F1
#28 BUS
P5
J5
JEWEL LIGHT
RECORD PLAYER MOTOR
ON
OFF
RED
BLK
BRN
P-3
J-3
GRN
BLK.
BRN.
117 AC SUPPLY



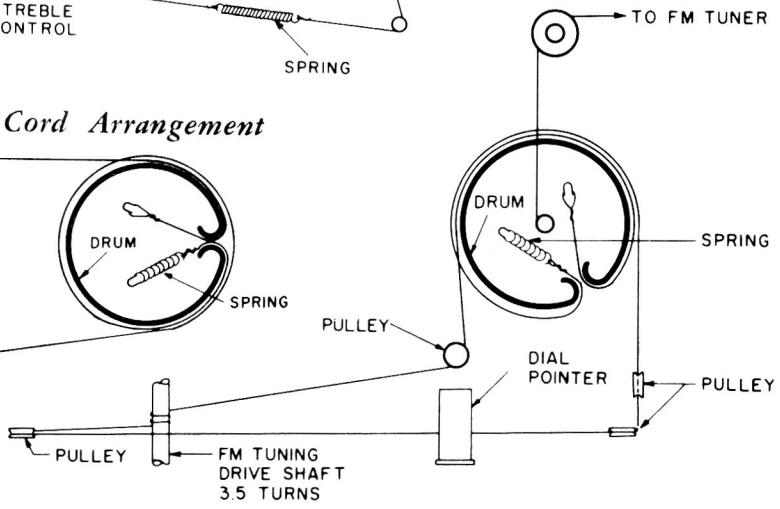
Dial Cord Stringing Arrangement viewed from Face of Chassis



Bass-Treble Dial Cord Arrangement



AM Dial Cord Arrangement



FM Dial Cord Arrangement

Record changer	Garrard Model Type "A"
Stylus 33-1/3, 45 r.p.m. 78 — Diamond	63-25203 *63-25636

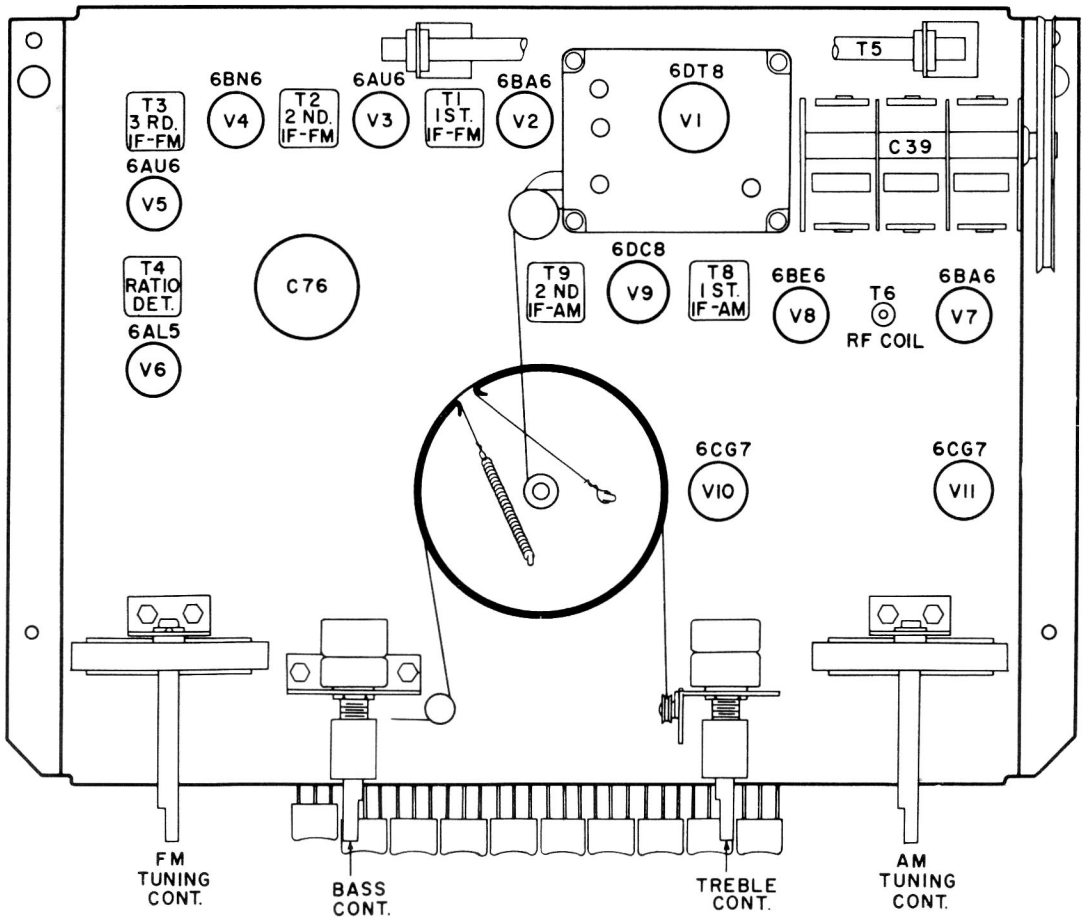
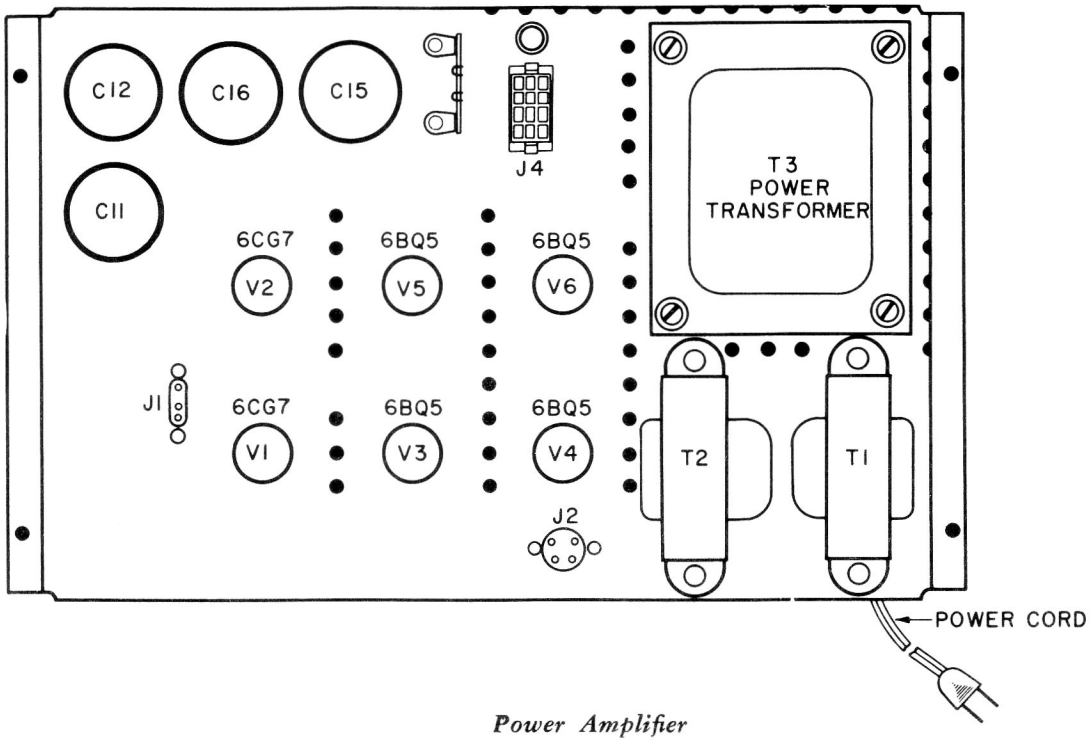


Fig. 1 Chassis Layout
Model SHC 766



Power Amplifier

ALIGNMENT PROCEDURE

ALIGNMENT INDICATORS

An RCA "VoltOhmyst®" or equivalent VTVM is necessary for measuring developed d-c voltage during FM alignment. Connections are specified in the alignment tabulation. An output meter is also necessary to indicate maximum audio output during AM alignment. Connect the output meter across the speaker voice coil. The RCA "VoltOhmyst®" can also be used as an AM alignment indicator, either to measure audio output or to measure AVC voltage. When audio output is being measured, the volume control should be turned to maximum. Adjust tone control to mid-position.

SIGNAL GENERATOR

For all alignment operations, connect the low side of the signal generator to the receiver chassis, close to the point of signal injection. If output measurement is used for AM alignment the signal generator output should be kept as low as possible to avoid AVC action.

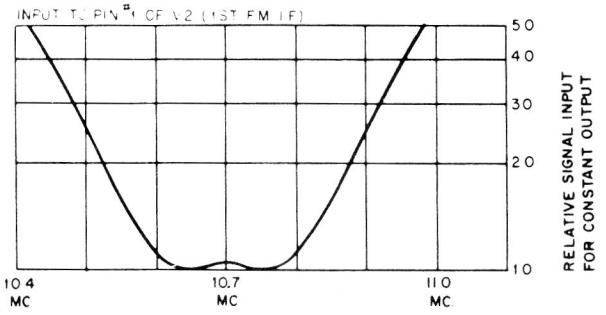
AM ALIGNMENT

Turn SELECTOR switch to AM position, and turn LOUDNESS control to maximum. Connect output meter across voice coil of speaker or to TAPE jack. Keep generator output low to avoid AVC action.

Step	Connect high side of signal generator to—	Set signal gen. to—	Set radio dial to—	Adjust for maximum
1	Pin #1 of V7 (6BA6) thru 0.01 capacitor	455 kc (modulated)	Quiet point near 1620 kc	T8 (2nd AM IF) top & bottom
2	Stator of antenna gang (C39A)			T6 (1st AM IF) top & bottom
3	Repeat steps 1 and 2.			
4	Short wire placed near AM antenna to radiate signal	1620 kc (modulated)	1620 kc	Osc. trimmer (C39B-T)
5		1400 kc (modulated)	1400 kc	Ant. trimmer (C39A-T)
6		600 kc (modulated)	600 kc signal (rock gang)	T-7 (osc. coil)
7	Repeat steps 4, 5, and 6.			

ALTERNATE FM ALIGNMENT PROCEDURE

If an FM sweep generator is used for FM alignment, adjust for 10.7 mc, 0.4 mc sweep. Connect oscilloscope across C-28, adjusting top core of T-8 (discriminator transformer) for 10.7 mc crossover, and bottom core of T-8 for balanced peaks. Peak separation should be approximately 330 kc. When aligning the other FM tuned circuits, connect oscilloscope lead across C-23. Follow alignment table sequence, adjusting for maximum gain and symmetrical curves.



FM IF Transformer Response

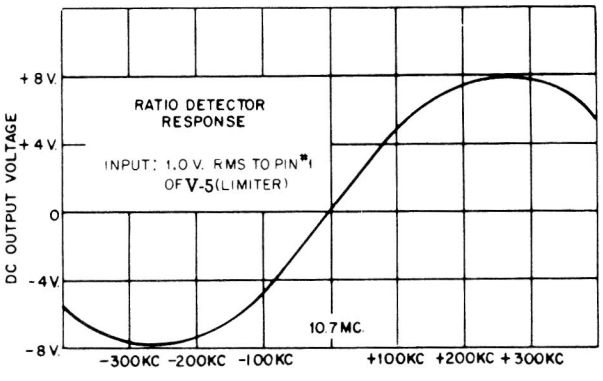
FM ALIGNMENT

Set PUSHBUTTON in FM position, turn LOUDNESS control to maximum, and set AFC to OFF.

Step	Connect high side of signal generator to—	Set signal gen. to—*	Set radio dial to—	Adjust for maximum
1	Pin #1 of V-5 (6AU6) thru 0.01 mf capacitor	Connect "VoltOhmyst®" across C27		
2		10.7 mc	Quiet point on dial near 108 mc	T-4 top for ZERO voltage (cross-over)
3		Connect "VoltOhmyst®" across R-34.		
4		10.7 mc	Quiet point on dial near 108 mc	T-4 bottom
5		Repeat steps 2 and 4.		
6	Pin #2 of V-4 (6BN6)	10.7 mc	Quiet point on dial	T-3 top T2 top
7	Pin #1 of V-3 thru 4700 mmf ceramic cap.			T1 top & bottom†
8	Antenna terminal board (thru matching network if required)			T102 primary†
9				T102 secondary†
10		Repeat steps 6, 7, 8, and 9.		
11		Connect output meter across voice coil of speaker.		
12		108.5 mc, 400 cycle mod.	108.5 mc	FM tuner string drive collar
13		87.5 mc, 400 cycle mod.	87.5 mc	C112 (osc. trimmer)
14		95 mc, 400 cycle mod.	95 mc (rock dial)	C107 (RF trimmer)
15		Repeat steps 12, 13, and 14.		

* Adjust output level of signal generator to provide approximately 1 volt indication on "VoltOhmyst®."

† Alternate loading may be required for accurate peaking; the winding not being peaked should be loaded with resistor of 270 ohms in Steps 7, 8, and 9.



Ratio Detector Response