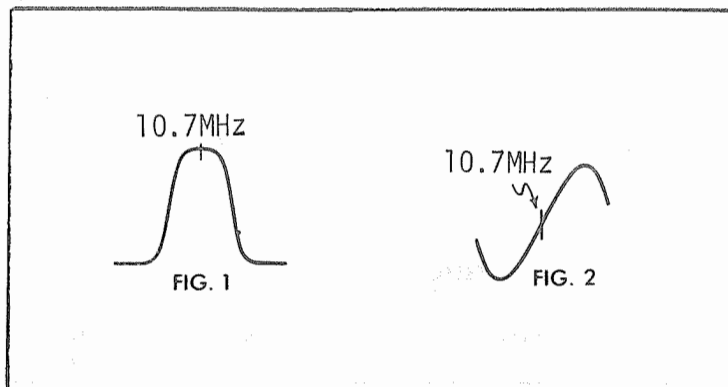


Pages 27-36 Courtesy of LAFAYETTE RADIO ELECTRONICS.



ALIGNMENT INSTRUCTIONS

CAUTION: Use isolation transformer or observe polarity when connecting test equipment. Maintain line voltage at 120VAC. Allow a 15-minute warm-up period. Use only enough generator output to obtain a suitable indication.

AM ALIGNMENT—SELECTOR IN AM POSITION

Connect generator across loop fashioned of several turns of wire. Set volume at maximum.

GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
455kHz 400-hertz Modulation	Tuning gang fully open	Output meter across voice coil	T114, T113, T112	Adjust for maximum. Repeat until no further improvement is noted.
600kHz	Tune to signal	"	T111	Adjust for maximum.
1640kHz	"	"	T110	Adjust for maximum.
1400kHz	"	"	CT7, CT6, CT5	Adjust for maximum. Repeat AM alignment until no further improvement is noted.

ALIGNMENT INSTRUCTIONS (Continued)

FM IF ALIGNMENT USING AM SIGNAL GENERATOR—SELECTOR IN FM POSITION

High side of generator thru .001 uF to Base Q103, low side to ground.				
GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MHz Unmodulated	Point of non-interference	DC probe of VTVM to Cathode D106 common to ground.	T109 (Pri.), T108, T107, T106, T105	Adjust for maximum.
"	"	DC probe of VTVM to Jct. R112 and R113 common to ground.	T109 (Bottom) Sec.	Adjust for zero reading. A positive or negative reading will be obtained on either side of correct setting.

FM IF ALIGNMENT USING FM SIGNAL GENERATOR—SELECTOR IN FM POSITION

High side of generator thru .001 uF to Base Q103, low side to ground. Use only enough marker signal for indication. Use 60-hertz frequency modulated signal with 450kHz sweep. Use 60-hertz sawtooth voltage in scope for horizontal deflection.				
GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
10.7MHz 450kHz Sweep	Point of non-interference	Vert input of scope to Cathode D106, low side to ground.	T109 (Pri.), T108, T107, T106, T105	Adjust for maximum gain and symmetry of response similar to Fig. 1 with markers as shown.
"	"	Vert input of scope to Jct. R112 & R113 low side to ground.	T109 (Sec.)	Adjust T109 (Sec.) to place marker at center of S curve similar to Fig. 2. Readjust T109 (Pri.) for maximum amplitude and straightness of line.

FM RF ALIGNMENT—SELECTOR IN FM POSITION

Connect generator across antenna terminals with 120-ohm carbon resistor in series with each lead. Adjustment of coils by bending should not be attempted unless the coil is deformed or replaced.				
GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
88MHz Unmodulated	Low freq end	DC probe of VTVM to Cathode D106 common to ground.	T104, T103, T102, T101	Adjust for maximum.
108 MHz Unmodulated	Tune to signal	"	CT104, CT3, CT2, CT1	Adjust for maximum. Repeat FM RF steps until no further improvement is noted.

FM STEREO MULTIPLEX ALIGNMENT USING FM STEREO SIGNAL GENERATOR (± .0001% ACCURACY)

High side of generator thru 47K to Junction R112 and R113 low side to ground.				
GENERATOR FREQUENCY	INDICATOR		ADJUST	REMARKS
67kHz	Vert input of scope thru 47K to Base Q106, low side to ground.		L105	Adjust for MINIMUM.
19kHz	Vert input of scope thru 47K to Anode D108, low side to ground.		T116, T115	Adjust for maximum.
19kHz	Vert input of scope thru 47K to Cathode D110 low side to ground.		T117	Adjust for maximum 38kHz response.

SEMICONDUCTORS

ITEM	PART NO.	TYPE
D101	1206-17	1S34
D102	1206-17	1S34
D103	1206-17	1S34
D104	1206-17	1S34
D105	1206-17	1S34
D108	1206-17	1S34
D109	1206-17	1S34
D110	1206-17	1S34
D111	1206-17	1S34
D112	1206-17	1S34
D113	1206-17	1S34
D114	1206-17	1S34
D115	1206-17	1S34
D116	1851-17	SV02
D117	1855-17	10D-1
D118	1855-17	10D-1
D119	1854-17	10D-4
D120	1854-17	10D-4
D121	1854-17	10D-4
D122	1854-17	10D-4
D123	1550-17	ZR212
IC101	1000-25	ICF-1
IC102	1000-25	ICF-1
IC103	1000-25	ICF-1
IC104	1000-25	ICF-1
Q1	1548-17	2SD92
Q2	1548-17	2SD92
Q3	1548-17	2SD92
Q4	1548-17	2SD92
Q101	1859-17	MPF107
Q102	1859-17	MPF107
Q103	1852-17	2SC717
Q104	1852-17	2SC717
Q105	1858-17	CS1502A
Q106	1857-17	CS1504
Q107	1858-17	CS1502B
Q108	1858-17	CS1502A
Q109	1751-17	2SC828S
Q110	1856-17	CS1503
Q111		2SC538A
Q112	1804-17	2SC485Y
Q113	1850-17	2N4356
Q114		2SD219
Q201	1712-17	2SC650
Q202		2SC644
Q301	1751-17	CS1503
Q302	1751-17	CS1503
Q303	1712-17	2SC650C
Q304	1712-17	2SC650C

ELECTROLYTIC/VARIABLE CAPS

ITEM	PART NO.	VALUE
C9	1308-12	1 uF 25 V
C11	1308-12	1 uF 25 V
C14	2743-12	2000 uF 50 V
C15		1 uF 85 V
C16		1 uF 15 V
C165	1308-12	1 uF 25 V
C166	1308-12	1 uF 25 V
C167	1308-12	1 uF 25 V
C168	2675-12	100 uF 6 V
C169	2658-12	10 uF 16 V
C172	2675-12	100 uF 6 V
C174		47 uF 25 V
C175	1008-12	1000 uF 25 V
C179	1008-12	1000 uF 25 V
C180	2702-12	100 uF 16 V
C181	2702-12	100 uF 16 V
C201		4.7 uF 16 V
C202	2677-12	3.3 uF 16 V
C203	2658-12	10 uF 16 V
C205		220 uF 6 V
C206	2661-12	47 uF 16 V
C207	2100-12	10 uF 25 V
C301	2711-12	4.7 uF 6 V

C302		33 uF 16 V
C303	2661-12	47 uF 16 V
C304		33 uF 16 V
C309	2658-12	10 uF 16 V
C310	2658-12	10 uF 16 V
C311		100 uF 16 V
C316	2658-12	10 uF 16 V
C317	2658-12	10 uF 16 V
C318	2675-12	100 uF 6 V
C319		220 uF 25 V
CT104	2734-12	Trimmer
CT108	2733-12	Trimmer
	2732-12	Tuning Gang

CONTROLS/SPECIAL RESISTORS

ITEM	PART NO.	DESCRIPTION
RV1	1494-11	10 K Dual Volume
RV301 & 1493-11		50 K Dual Bass
RV302		
RV303 & 1493-11		50 K Dual Treble
RV304		

COILS/TRANSFORMERS

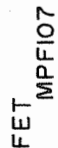
ITEM	PART NO.
L1	2109-23
L2	2109-23
L3	2109-23
L4	2109-23
L101	2108-23
L102	2108-23
L103	2108-23
L104	2108-23
T101	2104-23
T102	2105-23
T103	2105-23
T104	2107-23
Power	1535-15

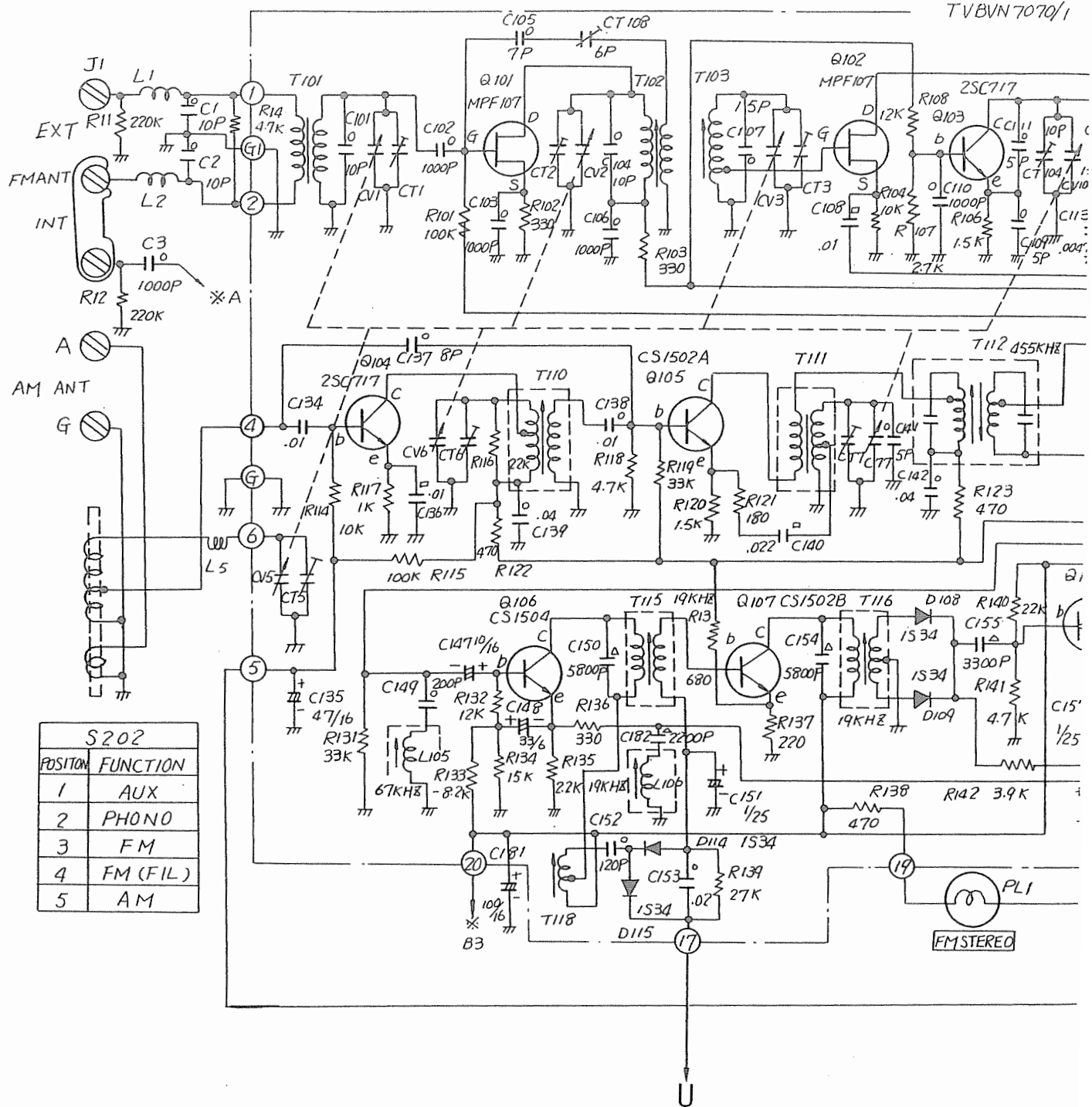
MISCELLANEOUS

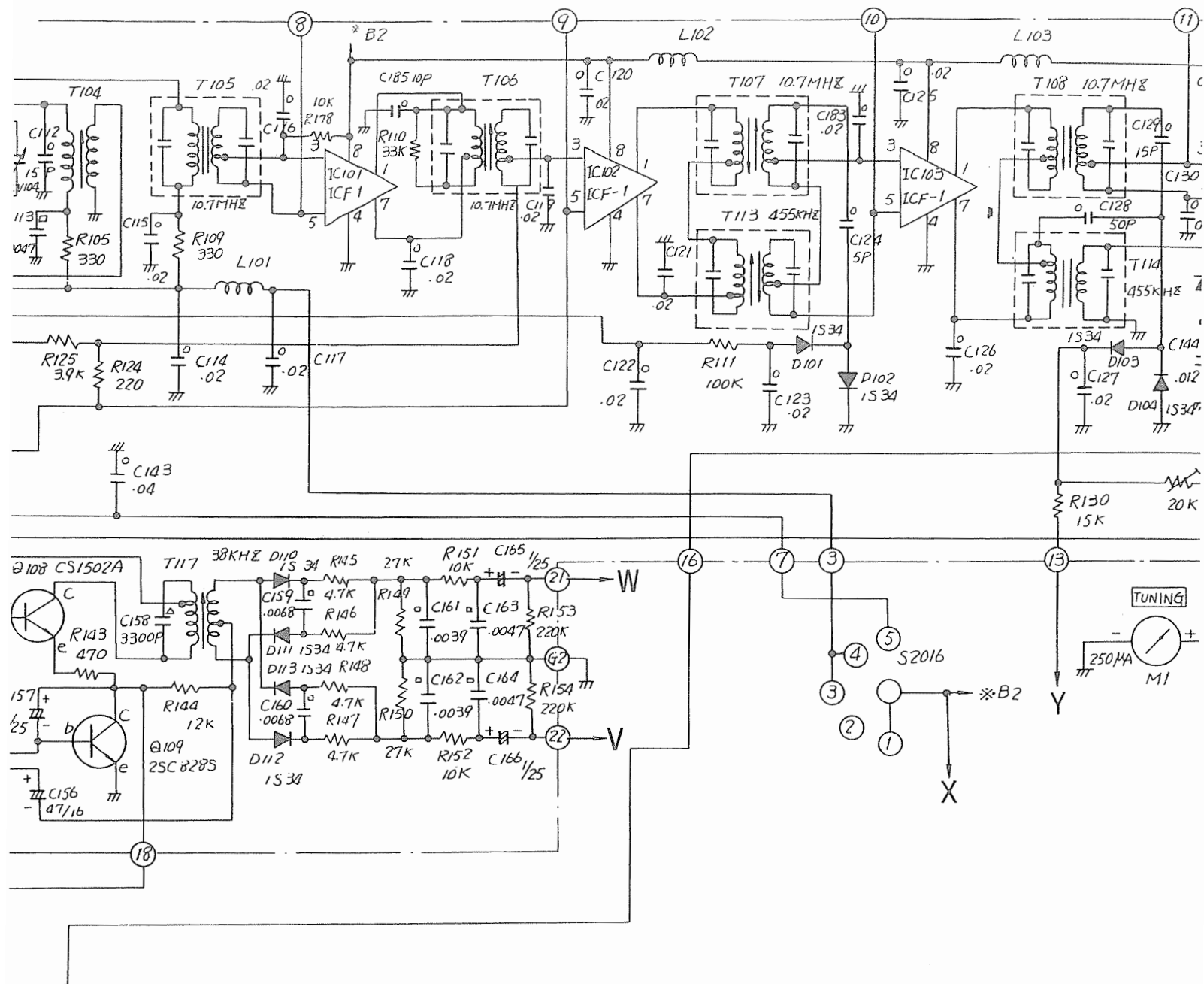
ITEM	NAME	PART NO.
F3	Fuse, 3/4 A	1729-19
M1	Meter, Tuning	1052-27
S1	Switch, Monitor	1576-14
S2	Switch, Mode	1576-14
S3	Switch, Loudness	1576-14
S4	Switch, Filter	1576-14
S5	Switch, Speaker	1577-14
S202	Switch, Function	1578-14

CABINET PARTS

NAME	PART NO.
Plate, Escutcheon	4770-10
Knob, Tuning	1368-18
Knob, Speaker	1367-18
Knob, Selector	1371-18
Knob, Bass/Treble	1370-18
Knob, Front Volume	1369-18
Knob, Rear Volume	1602-18

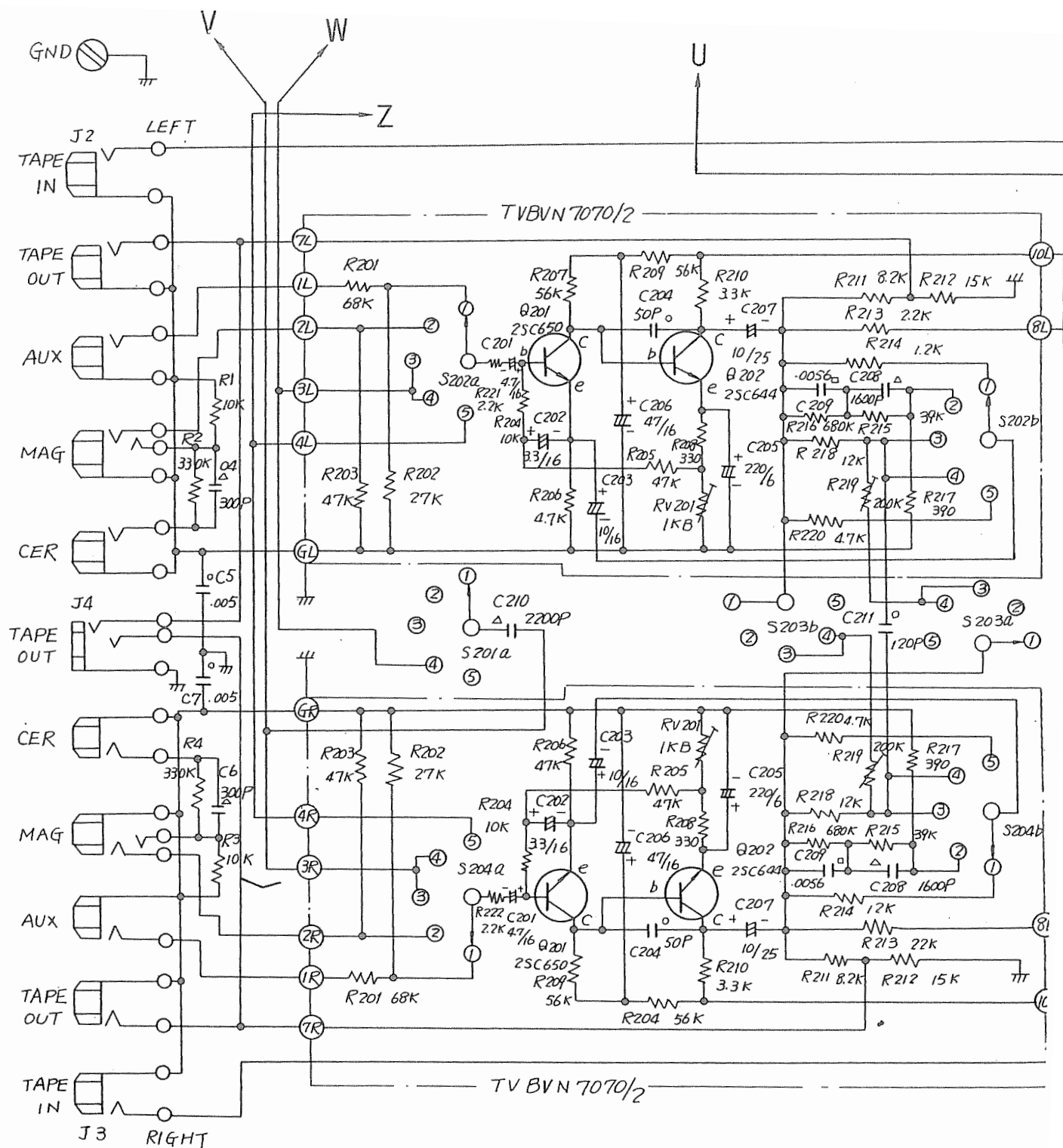


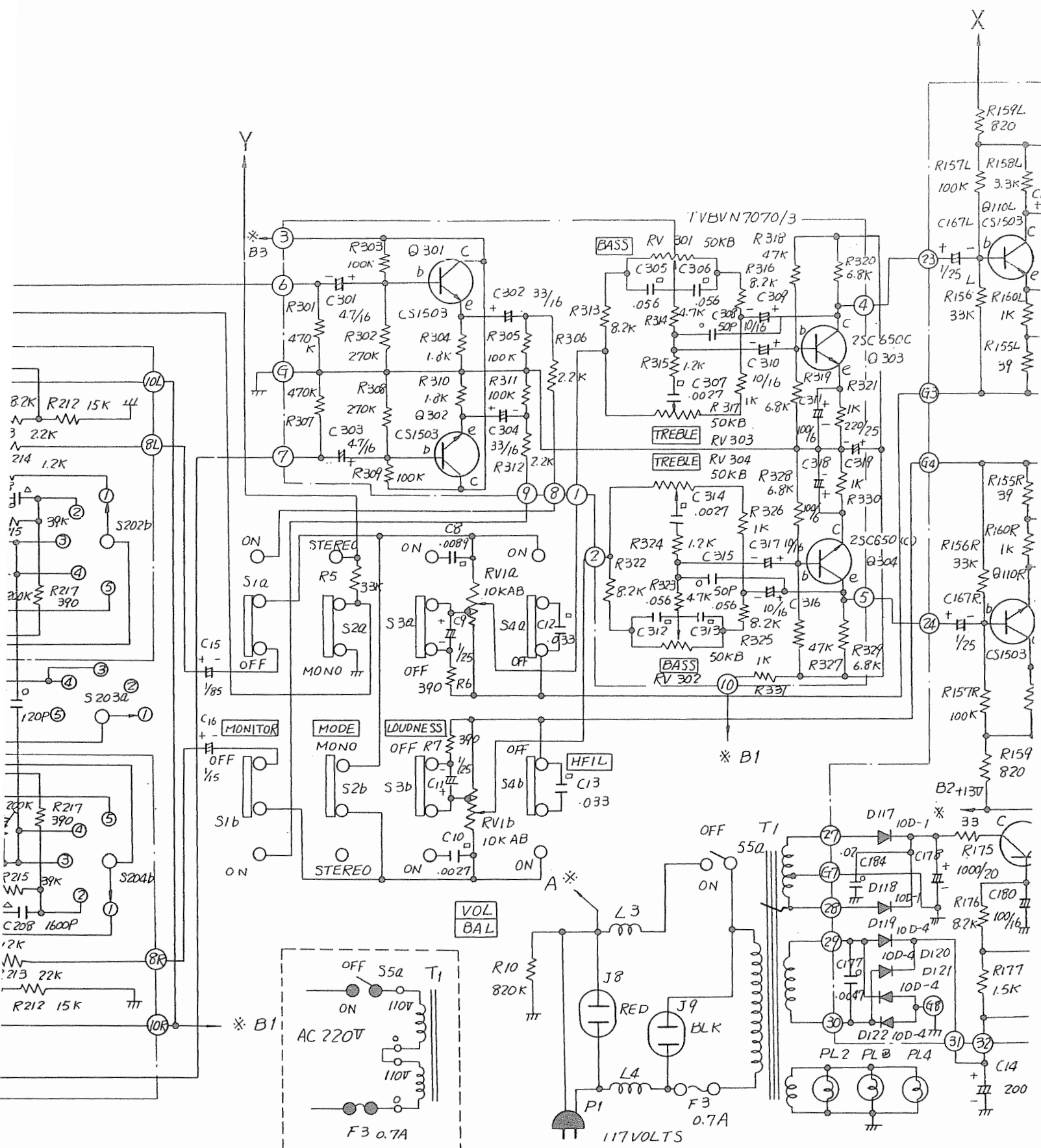




TUNER SCHEMATIC







AMPLIFIER SCHEMATIC

