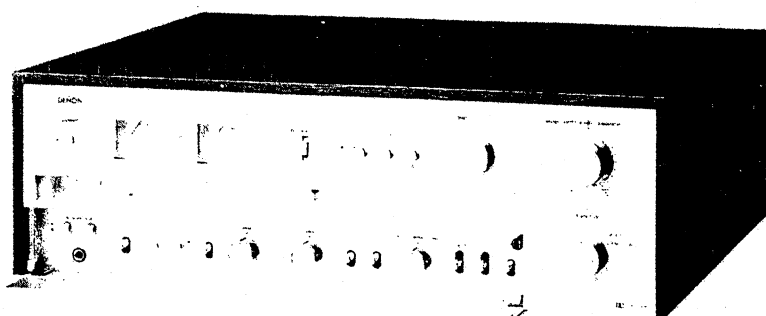


DENON

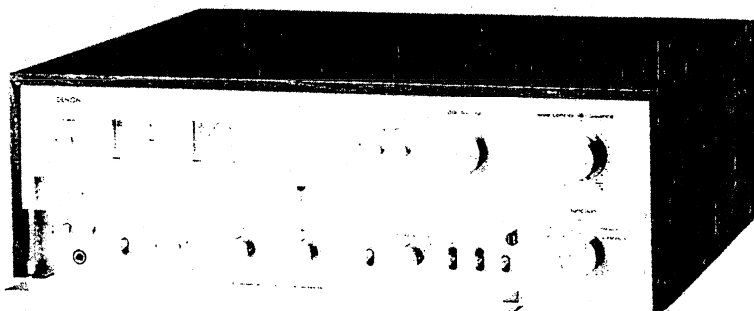
Hi-Fi Component/Receiver

SERVICE MANUAL

MODEL GR-555, GR-535



GR-555



GR-535

TABLE OF CONTENTS

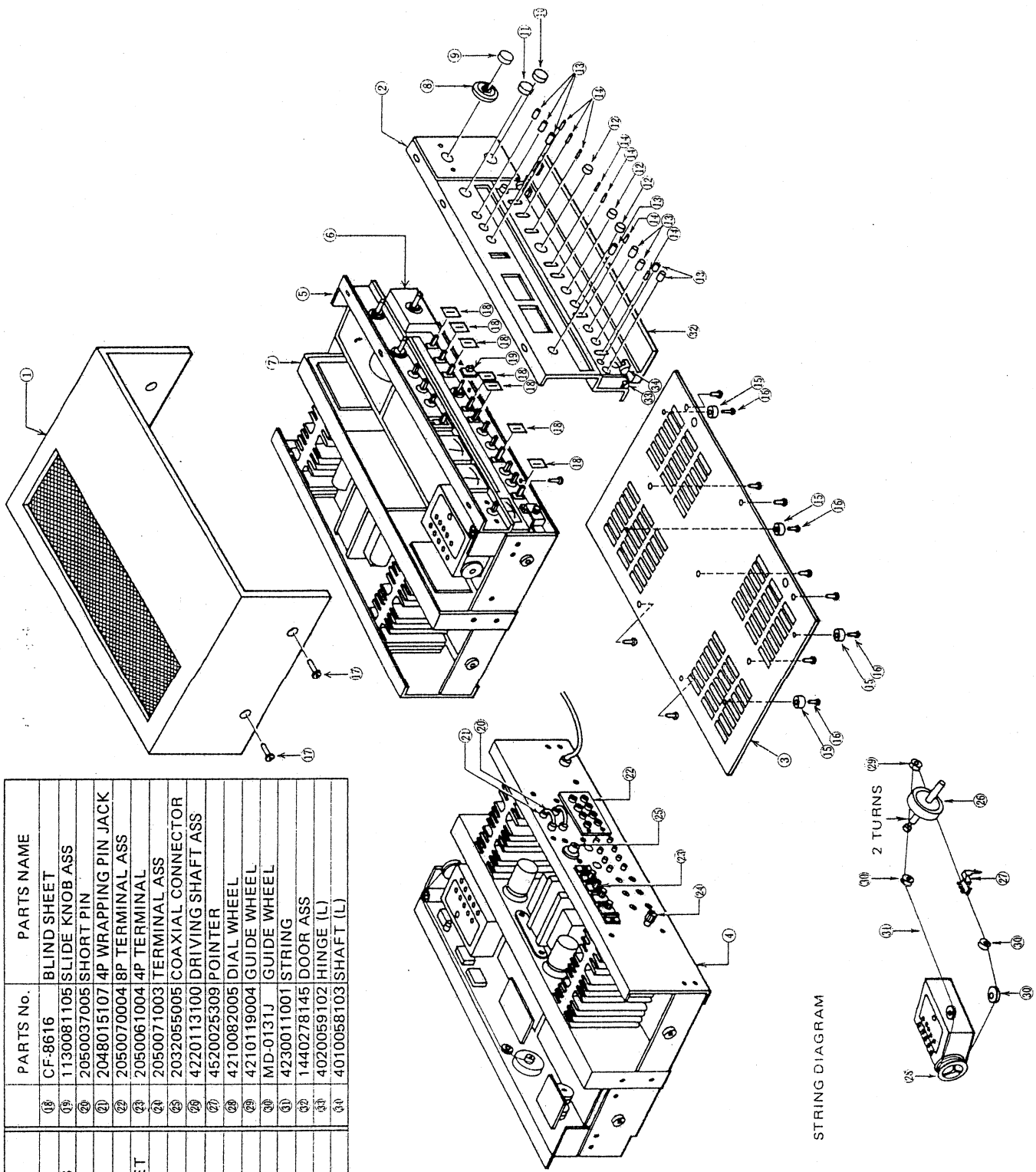
SPECIFICATIONS (GR-555, GR-535)	2
CHASSIS LAYOUT (GR-555, GR-535)	3
EXPLODED VIEW OF CHASSIS AND CABINET (GR-555, GR-535)	4
DISASSEMBLY INSTRUCTIONS (GR-555, GR-535)	6
METHOD OF ADJUSTMENT AND POWER AMPLIFIER ALIGNMENT (GR-555, GR-535)	8
THE VIEW OF THE FRONT END (GR-555, GR-535)	10
PRINTED CIRCUIT BOARD PATTERNS, CIRCUIT DIAGRAMS AND PARTS LIST	
INPUT TERMINAL UNIT (GR-555, GR-535) ETC-213	11
IF UNIT OF FM SECTION (GR-555) HUX-003E	12
IF UNIT OF FM SECTION (GR-535) HUX-005A	14
EQUALIZER AMP UNIT (GR-555, GR-535) EUX-006	15
MPX & METER UNIT (GR-555, GR-535) ETC-212A/B	16
DOLBY NR UNIT (GR-555) ETC-215	18
PRE TONE CONTROL UNIT (GR-555, GR-535) AUX-020	20
TONE CONTROL UNIT (GR-555, GR-535) AUX-015A/B	21
VOLUME & SWITCH UNIT (GR-555, GR-535) ETC-205A/B	23
POWER SOURCE & PROTECTOR UNIT (GR-555, GR-535) ETC-211A/B	24
POWER AMP UNIT (GR-555, GR-535) PUX-012A/B	26
CHASSIS AND CABINET GROUP PARTS LIST (GR-555, GR-535)	27
WIRING DIAGRAM (GR-555, GR-535)	29
BLOCK DIAGRAM (GR-555, GR-535)	31

NIPPON COLUMBIA CO., LTD.

SPECIFICATIONS

	GR-555	GR-535
TUNER SECTION		
circuit system	super heterodyne	super heterodyne
tuning range	88 - 108MHz	88 - 108MHz
intermediate frequency	10.7MHz	10.7MHz
usable sensitivity	1.8 μ V (IHF)	2.0 μ V (IHF)
signal to noise ratio	75 dB	70 dB
AM suppression	60 dB	55 dB
capture ratio	1.4 dB	1.7 dB
effective selectivity	80 dB	80 dB
image rejection	105 dB	85 dB
IE rejection	105 dB	90 dB
spurious rejection	105 dB	90 dB
total harmonic distortion (mono 1KHz)	0.15%	0.15%
total harmonic distortion (stereo 1KHz)	0.3%	0.3%
FM stereo separation (1KHz)	45 dB	40 dB
Dolby deviation	± 1.5 dB (20Hz - 10KHz)	
POWER AMPLIFIER SECTION		
circuit system	pure complementary OCL differential amplifier	pure complementary OCL differential amplifier
music power	160W + 160W (4 ohm)	130W + 130W (4 ohm)
rated output power (both channels driven) (1KHz)	120W + 120W (4 ohm)	80W + 80W (4 ohm)
rated output power (both channels driven) (1KHz)	85W + 85W (8 ohm)	60W + 60W (8 ohm)
rated output power (both channels driven) (20Hz - 20KHz)	110W + 110W (4 ohm)	65W + 65W (4 ohm)
rated output power (both channels driven) (20Hz - 20KHz)	80W + 80W (8 ohm)	55W + 55W (8 ohm)
total harmonic distortion (20Hz - 20KHz)	less than 0.1% at rated output	less than 0.1% at rated output
inter modulation distortion 60Hz/7KHz (4 : 1)	less than 0.1% at rated output less than 0.05% 1W output	less than 0.1% at rated output less than 0.05% 1W output
power bandwidth	5Hz - 50KHz (-3 dB)	5Hz - 50KHz (-3 dB)
frequency response	5Hz - 100KHz ($\begin{smallmatrix} +0 \\ -1 \end{smallmatrix}$ dB)	5Hz - 100KHz ($\begin{smallmatrix} +0 \\ -1 \end{smallmatrix}$ dB)
input sensitivity	1V rms	1V rms
input impedance (20Hz - 20KHz)	80K ohms $\begin{smallmatrix} +10\% \\ -30\% \end{smallmatrix}$	80K ohms $\begin{smallmatrix} +10\% \\ -30\% \end{smallmatrix}$
output impedance	less than 0.2 ohm	less than 0.2 ohm
residual noise	less than 0.3mV	less than 0.3mV
output terminal	speakers A & B (4 - 16 ohm) phones (4 - 16 ohm)	speakers A & B (4 - 16 ohm) phones (4 - 16 ohm)
PREAMPLIFIER SECTION		
maximum output/load impedance	15V rms (50K ohm)	15V rms (50K ohm)
rated output	1V rms	1V rms
total harmonic distortion (1KHz)	less than 0.05%	less than 0.05%
EQ amplifier output (rec. out)	15V rms (50K ohm)	15V rms (50K ohm)
rated output	150mV rms	150mV rms
total harmonic distortion (1KHz)	less than 0.02% at rated output	less than 0.02% at rated output
input sensitivity/impedance	PHONO-1 2.3mV (1KHz)/47K ohm $\pm 10\%$ PHONO-2 2.3mV (1KHz)/47K ohm $\pm 10\%$ AUX 135mV/100K ohm TAPE 1, 2 135mV/70K ohm REC/PB (DIN) 500mV rms	PHONO-1 2.3mV (1KHz)/47K ohm $\pm 10\%$ PHONO-2 2.3mV (1KHz)/47K ohm $\pm 10\%$ AUX 135mV/100K ohm TAPE 1, 2 135mV/70K ohm REC/PB (DIN) 500mV rms
phono allowable input (1 & 2)	240mV rms (1KHz)	240mV rms (1KHz)
RIAA deviation (PHONO 1 & 2)	± 0.3 dB (20Hz - 20KHz)	± 0.3 dB (20Hz - 20KHz)
S/N ratio (IHF "A" network at input terminal shorted)	PHONO-1 & 2 better than 75 dB AUX tape-1 & 2 better than 95 dB	PHONO-1 & 2 better than 75 dB AUX tape-1 & 2 better than 95 dB
tone control frequency (tone defeat)	20Hz - 50KHz, -0.5 dB	20Hz - 50KHz, -0.5 dB
tone control (turn over/range)	BASS 500Hz/100Hz ± 10 dB 250Hz/50Hz ± 10 dB TREBLE 2.5KHz/10KHz ± 10 dB 5KHz/20KHz ± 10 dB	BASS 500Hz/100Hz ± 10 dB TREBLE 2.5KHz/10KHz ± 10 dB
low cut filter	15Hz (12 dB/oct)	15Hz (12 dB/oct)
high cut filter	7KHz (6 dB/oct)	7KHz (6 dB/oct)
muting	0, -20 dB	0, -20 dB
OVERALL CHARACTERISTICS		
channel separation (phono in-speaker out)	better than 70 dB (1KHz) better than 55 dB (20Hz - 10KHz)	better than 70 dB (1KHz) better than 55 dB (20Hz - 10KHz)
total harmonic distortion	less than 0.1% (20Hz - 20KHz)	less than 0.1% (20Hz - 20KHz)
frequency response (phono in-speaker out)	20Hz - 20KHz, ± 0.4 dB (1W)	20Hz - 20KHz, ± 0.4 dB (1W)
power source	AC 220V, 50Hz	AC 220V, 50Hz
power consumption	550W	420W
dimensions (W x H x D)	518 x 178 x 383 mm	518 x 178 x 383 mm
weight	20.5 Kg	20 Kg

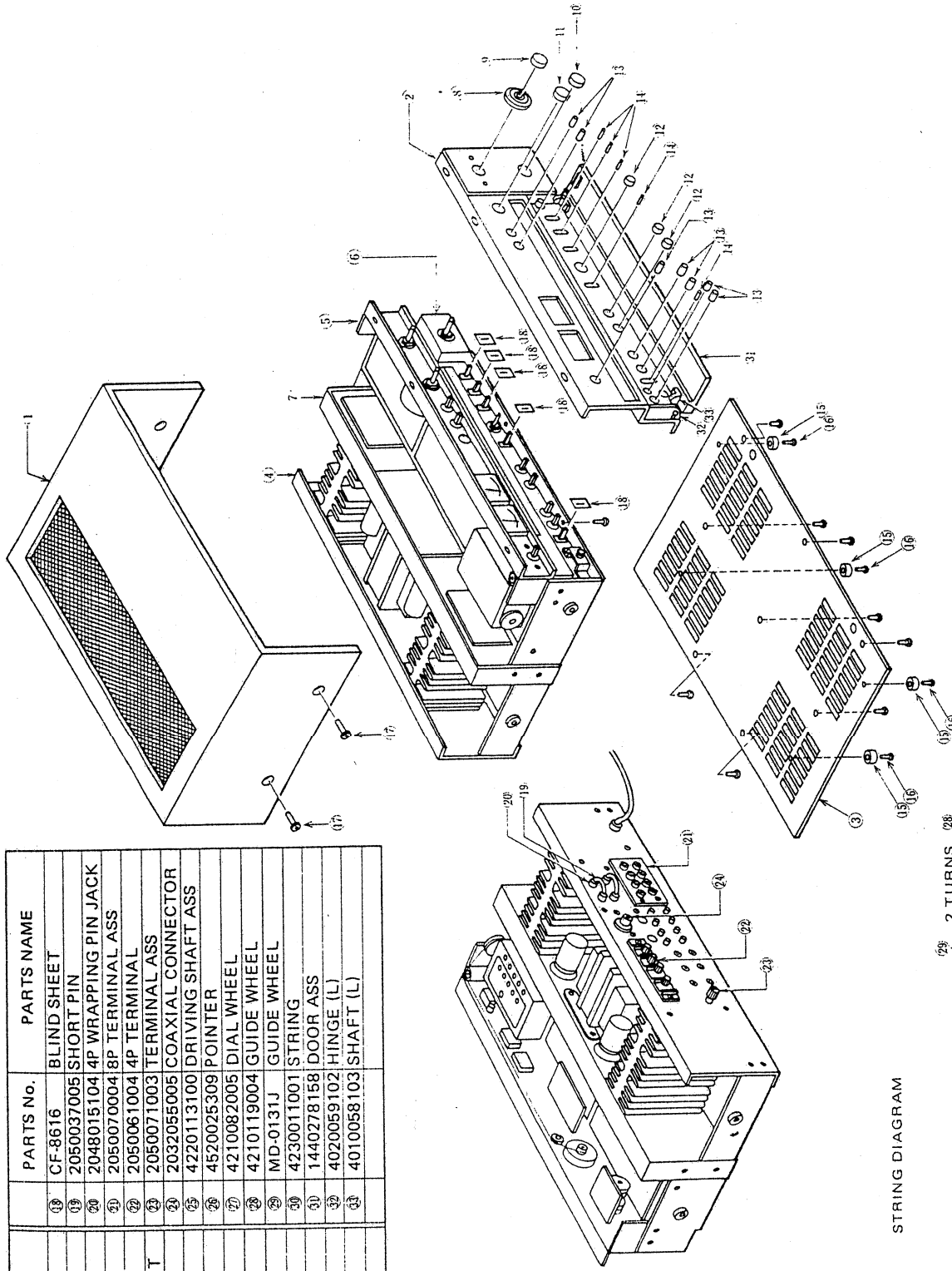
GR-555 EXPLODED VIEW OF CHASSIS AND CABINET



PARTS No.	PARTS NAME	PARTS No.	PARTS NAME
1	1020047107 TOP COVER	13	CF-8616 BLIND SHEET
2	1440266131 FRONT PANEL ASS	14	1130081105 SLIDE KNOB ASS
3	1050148306 BOTTOM COVER	15	2050037005 SHORT PIN
4	1050149237 BACK PANEL	16	2048015107 4P WRAPPING PIN JACK
5	4110118202 FRONT CHASSIS	17	2050070004 8P TERMINAL ASS
6	4120305209 CONTROL BRACKET	18	2050061004 4P TERMINAL
7	4110112305 PA CHASSIS	19	2050071003 TERMINAL ASS
8	1120139106 BALANCE KNOB	20	2032055005 COAXIAL CONNECTOR
9	1120138204 KNOB	21	4220113100 DRIVING SHAFT ASS
10	1120138217 KNOB	22	4520025309 POINTER
11	1120137205 TUNING KNOB	23	4210082005 DIAL WHEEL
12	1120136206 KNOB	24	4210119004 GUIDE WHEEL
13	1130075108 PUSH KNOB	25	MD-0131J GUIDE WHEEL
14	1130034000 LEVER KNOB	26	4230011001 STRING
15	1040027107 FOOT	27	1440278145 DOOR ASS
16	4711410011 4 x 20 CPS	28	4020059102 HINGE (L)
17	4770064107 FIXING SCREW	29	4010058103 SHAFT (L)

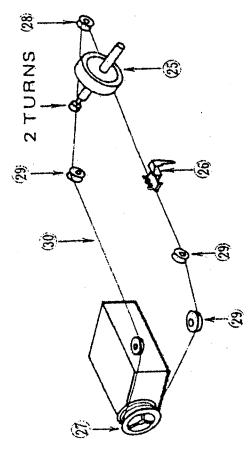
STRING DIAGRAM

GR-535 EXPLODED VIEW OF CHASSIS AND CABINET



PARTS No.	PARTS NAME	PARTS No.	PARTS NAME
1	1020047107 TOP COVER	18	CF-8616 BLIND SHEET
2	1440266144 FRONT PANEL ASS	19	2050037005 SHORT PIN
3	1050148306 BOTTOM COVER	20	2048015104 4P WRAPPING PIN JACK
4	1050149240 BACK PANEL	21	2050070004 8P TERMINAL ASS
5	4110118202 FRONT CHASSIS	22	2050061004 4P TERMINAL
6	4120305209 CONTROL BRACKET	23	2050071003 TERMINAL ASS
7	4110112305 PA CHASSIS	24	2032055005 COAXIAL CONNECTOR
8	1120139106 BALANCE KNOB	25	4220113100 DRIVING SHAFT ASS
9	1120138204 KNOB	26	4520025309 POINTER
10	1120138217 KNOB	27	4210082005 DIAL WHEEL
11	1120137205 TUNING KNOB	28	4210119004 GUIDE WHEEL
12	1120136206 KNOB	29	MD-0131J GUIDE WHEEL
13	1130075108 PUSH KNOB	30	4230011001 STRING
14	1130034000 LEVER KNOB	31	1440278158 DOOR ASS
15	1040021107 FOOT	32	4020059102 HINGE (L)
16	4711410011 4 x 20 CPS	33	4010058103 SHAFT (L)
17	4770064107 FIXING SCREW		

STRING DIAGRAM



GR-555, GR-535 DISASSEMBLY INSTRUCTIONS

In case of repairing the printed circuit board, it is more easily disassembled in the following order.

(1) Repairing of power amplifier unit, power supply and protector unit.

1. Remove the wooden cabinet by taking out the four screws fastening it.

2. Remove the bottom cover by taking out all the screws (four) fastening it.

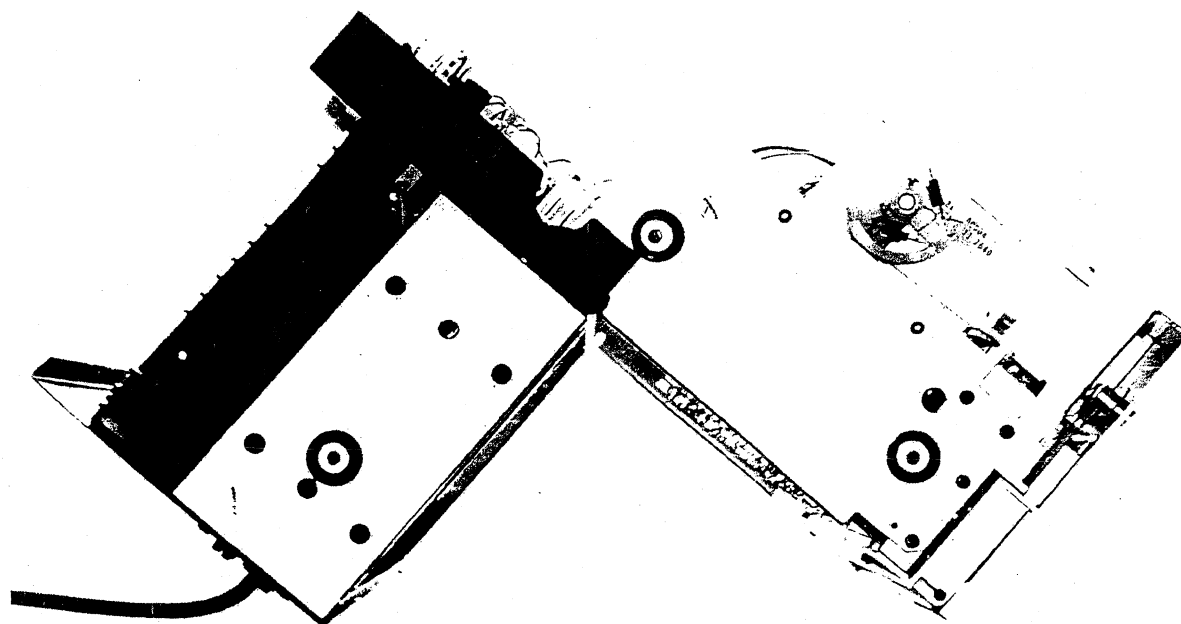
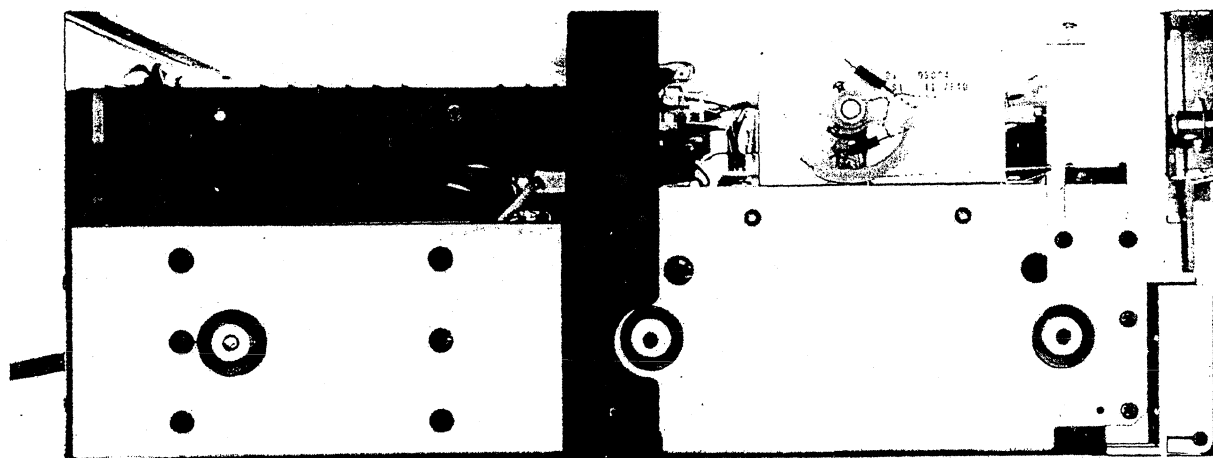
3. Take out the upper two screws of the four ones (two each at right and left) fastening the PA. chassis and side bracket, and loosen the lower two screws.

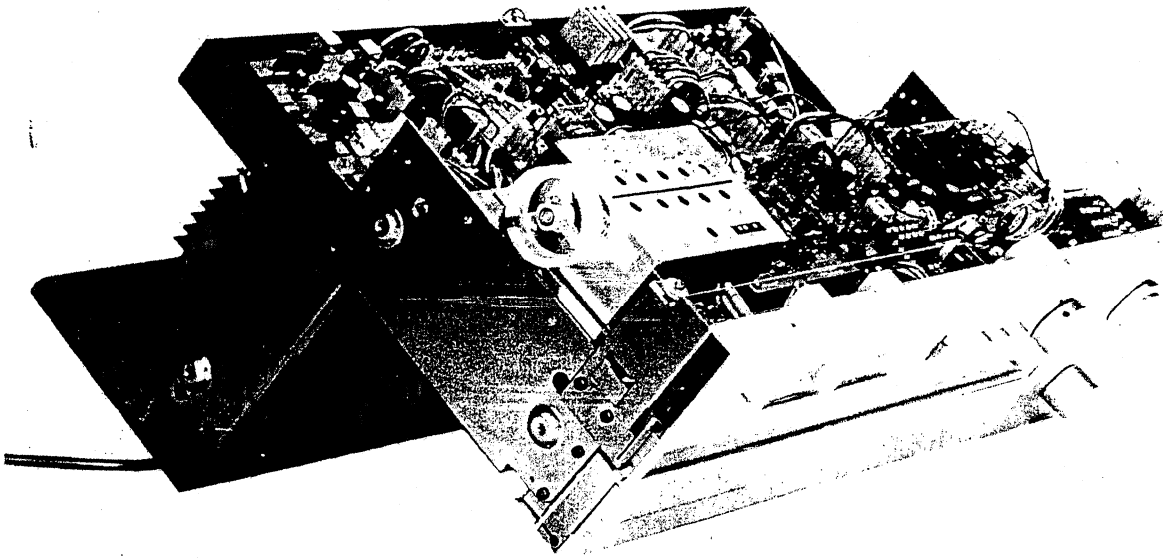
· Fig. 1 shows the side view of the set without its wooden cabinet and bottom cover. The lengthwise black part in the figure is the PA. chassis.

4. Push up the front panel at the screw part (loosened as in item 3) and the chassis will be two blocks perpendicular to each other. Thus the power amplifier unit and power supply unit can be easily removed or can have their parts replaced.

· Fig. 2 shows the side view of the set after the sequence of disassembly from item 1 to 4 has been completed, and Fig. 3 is the oblique view.

· In the above-mentioned state, take utmost care so that the bottom of both the back-and front panel may not slide.





(2) Repairing of the Preamplifier unit

1. Remove the wooden cabinet by taking out the four screws fastening it.
2. Remove the bottom cover by taking out all the eight screws.
3. Draw out all the knobs attached to the front panel.
4. Take out the upper and lower screws (four) fastening the front panel and chassis.
5. Draw out the front panel this side.
6. Take out a screw fastening the equalizer board and the shield bracket.
7. Take out all the screws (two each at right and left) fastening the control bracket and side bracket.
8. Lower the control bracket while drawing it this side.
9. Remove all the connector coupled with the main chassis.

GR-555 METHOD OF ADJUSTMENTS

STEP	ITEM	TUNER DIAL SETTING	SIGNAL GENERATOR					INDICATOR		ADJUST	ADJUST LIMITS	REMARKS
			TYPE	FREQ.	TUNER INPUT LEVEL	MODULATION	COUPLING	TYPE	CONNECTED TO			
1.	IF	98MHz	FM SG	98MHz	60dB/μV	CW	Through dummy ant. to 300 ohms ant. terminals	Signal strength meter		Top (sec.) and bottom (pri.) of T101 on front end unit. (2160009004)	Maximum signal strength meter	In following adjustments, specification of FM signal generator & stereo modulator have to warrant less than 0.1% distortion and more than 50dB stereo separation at 1kHz. Repeat step and until dial indicates within ±50kHz at 88MHz and 108 MHz. Also check accuracy of other frequency reading.
2.	Detector	Point of no interference & station			Received FM noise			Tuning meter		Top (sec.) of T201 on IF unit (HUX-003E)	Center point of tuning meter	
3.	Dial calibration	108MHz	FM SG	108MHz	60dB/μV	400Hz ±75kHz deviation	Through dummy ant. to 300 ohms ant. terminals	Same		OSC. trimmer Tc105 on front end unit (2160009004)	Same	
4.	Same	88MHz	Same	88MHz	Same	Same	Same	Same		OSC. coil L105 on front end unit (2160009004)	Same	
5.	Tracking	108MHz	Same	108MHz	Same	Same	Same	Signal strength meter		Tc101, 102, 103, 104 on front end unit (2160009004)	Maximum signal strength meter	
6.	Same	88MHz	Same	88MHz	Same	Same	Same	Same		L101, 102, 103, 104 on front end unit (2160009004)	Same	
7.	Monoural distortion	Same	Same	98MHz	Same	1000Hz ±75kHz deviation	Same	Distortion meter A.C. V.M. oscilloscope	Rec. output R-channel	Bottom (pri.) of T201 on IF unit (HUX-003E)	Minimum distortion	
8.	Audio output level	Same	Same	Same	Same	400Hz ±75kHz deviation	Same	Same	Same	VR. 202 on IF unit (HUX-003E)	1.1V	
9.	P.L.L. 19kHz	Same	Same	Same	Same	Same	Same	Frequency counter	T.P. 1	VR. 102 on MPX. & Audio unit (ETC-212A)	76kHz ±100Hz	
11.	Stereo distortion	Same	FM SG and stereo modulator	Same	Same	Stereo modulation L-channel ±6.75kHz deviation pilot ±7.5 kHz deviation	Same	Distortion meter A.C. V.M. oscilloscope	Rec. output L-channel	VR. 201 on IF unit (HUX-003A)	Minimum distortion	IF distortion is more than reading of 0.2%, turn top (sec.) and bottom (pri.) of T101 on front end unit (2160009004) to obtain reading of 0.15%.
12.	Stereo separation	98MHz	FM SG. and stereo modulator	98MHz	60dB/μV	Stereo modulation L or R channel ±6.75 kHz deviation pilot ±7.5kHz deviation	Through dummy ant. to 300 ohms ant terminals	Distortion meter A.C. V.M. oscilloscope	Fixed output L or R-channel	VR. 1 on MPX. and Audio Unit (ETC-212A)	Maximum separation	Check to alternate both channels
13.	Muting coil	98MHz	Same	98MHz	20dB/μV	400Hz ±75kHz deviation	Same	Signal strength meter		Top (sec.) and bottom (pri.) of T202 on IF unit (HUX-003E)	Maximum signal strength meter	Set muting switch to "ON" and VR. 204 to minimum counter clockwise position and then turn VR. 204 slowly in clockwise direction until audio output is obtained.
14.	Muting Trigger level	Same	Same	Same	Same	Same	Same	L or R channel level meter		VR. 204 on IF unit (HUX-003E)	Trig. on audio output	
15.	Signal strength meter	Same	Same	Same	60dB/μV	400Hz 22.5kHz deviation	Same	Signal strength meter		VR. 203 on IF unit (HUX-003E)	0dB point	Turn to obtain reading of 0dB (100%) on the signal strength meter
16.	Level meter		Audio 1,000Hz oscillator		1.0V		Main coupler input terminals	L and R-channel level meter	MPX & Meter	VR. 105 and VR. 106 on MPX & Meter unit (ETC-212A)	Adjust for +3dB both channels	Set meter selector switch to "AUDIO LEVEL"
17.	Tuner output level setting	98MHz	FM SG	98MHz	60dB/μV	400Hz ±75kHz deviation	Through dummy ant. to 300 ohms ant. terminals	L and R-channel level meter		VR. 103, and VR. 104 on MPX & Meter unit (ETC-212A)	Adjust for 0dB both channels	Set meter selector switch to "TUNER LEVEL"

GR-555 POWER AMPLIFIER ALIGNMENT

STEP	ITEM	UNIT	SIGNAL GENERATOR			COUPLING	SETTING		INDICATOR	ADJUST	ADJUSTING LIMITS	REMARKS
			TYPE	FREQ.	INPUT LEVEL		DOLBY SW	FUNCTION				
1.	Dolby Noise Reduction	ETC-215	CR. OSC	5kHz	Set the DOLBY SW to the OFF position PEC-1 OUTPUT: 35mV	Connected to 5 or 8 terminal. (L or R)	DOLBY SW : OFF position FUNCTION : FM-AUTO position	Turn VR1 and VR2 clockwise (Max.)	1. 35mV 2. 11mV 3. 13.8mV	Adjust VR3 or VR4 (L or R) to input level.	±0.2dB ±0.2dB ±0.25dB	When connect the input signal to 5 or 8 terminal, an attachment (Refer to Fig. 1) is necessary.
2.	Center potential	PUX-012A					Short the MAIN-IN Coupler with the Short pin	SP-SWA: on	Oscilloscope DC terminal	PUX-012A (L & R) VR801	±100mV	Connect to SP-A terminal and ground.
3.	Power TR. Idleing Current	PUX-012A	No signal				Short the MAIN-IN Coupler with the Short pin.		Oscilloscope DC terminal	PUX-012A (L & R) VR802	30mV ± 5mV	Connect to Emitter of TR 807 and Emitter of TR808.

Attachment for Dolby unit Alignment

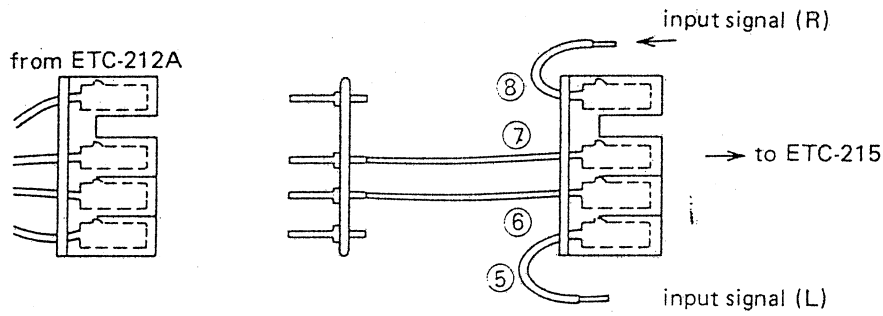


Fig. 1

GR-535 METHOD OF ADJUSTMENTS

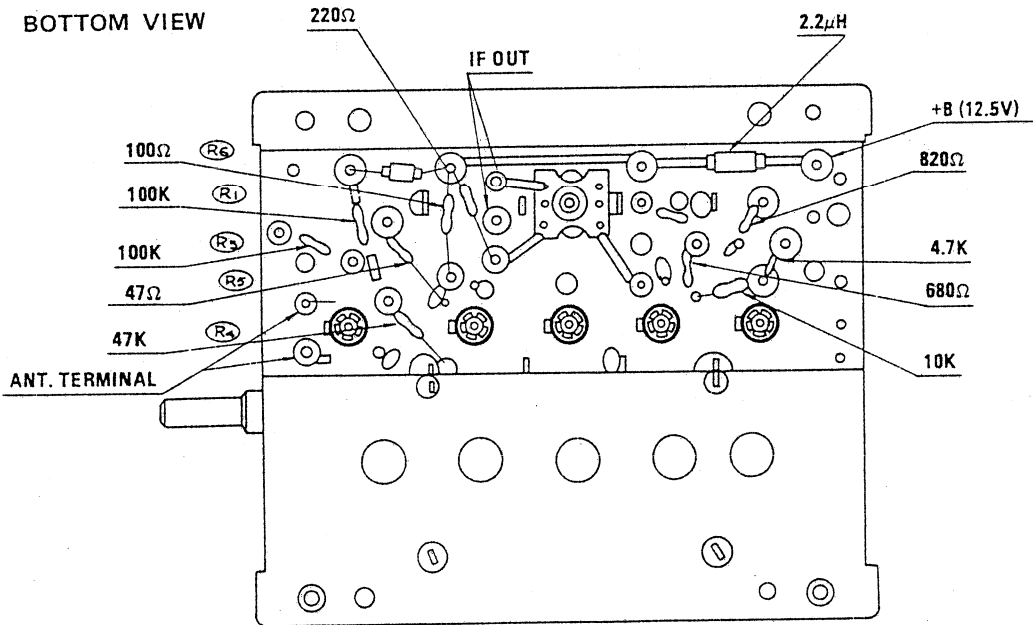
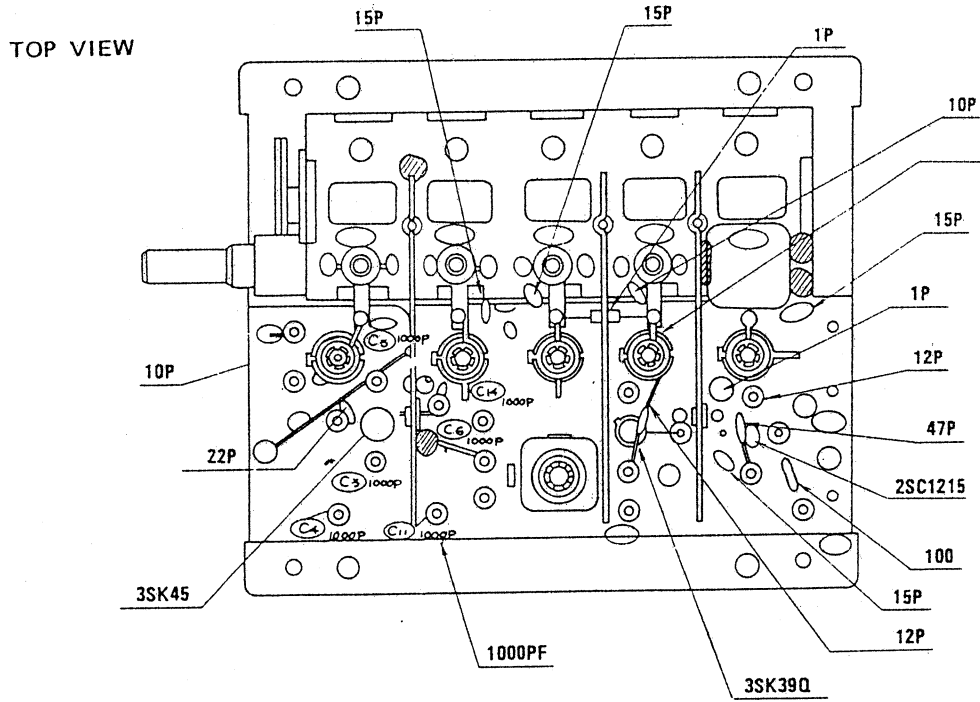
STEP	ITEM	TUNER DIAL SETTING	SIGNAL GENERATOR					INDICATOR		ADJUST	ADJUST LIMITS	REMARKS
			TYPE	FREQ.	TUNER INPUT LEVEL	MODULATION	COUPLING	TYPE	CONNECTED TO			
1.	Detector	Point of no interference & station	FM SG		Received FM noise		Through dummy ant. to 300 ohms ant. terminals	Tuning meter		Bottom (sec.) of T2 on IF unit (HUX-005A)	Center point of tuning meter	In following adjustments, specification of FM signal generator & stereo modulator have to warrant less than 0.1% distortion and more than 50dB stereo separation at 1 kHz. Repeat: step 4 and 5 until dial indicates within ± 50 kHz at 88MHz and 108MHz. Also check accuracy of other frequency reading.
2.	IF	98MHz	Same	98MHz	10dB/ μ V	400Hz ± 75 kHz deviation	Same			T101 on front end (2160013003) T201 & Top (pri.) of T202 on tuner unit (HUX-005A)	A.C.V.M. Maximum	
3.	Detector	Point of no interference & station	FM SG		Received FM noise		Through dummy ant. to 300 ohms ant. terminals	Tuning meter		Bottom (sec.) of T2 on IF unit (HUX-005A)	Center point of tuning meter	
4.	Dial calibration	108MHz	Same	108MHz	60dB/ μ V	400Hz ± 75 kHz deviation	Same	Same		OSC. trimmer Tc 106 on front end unit (2160013003)	Same	
5.	Same	88MHz	Same	88MHz	Same	Same	Same	Same		OSC. coil L104 on front end unit (2160013003)	Same	
6.	Tracking	108MHz	Same	108MHz	10dB/ μ V	Same	Same			Tc101, 103, 105 on front end unit (2160009106)	A.C.V.M. Maximum	
7.	Same	88MHz	Same	88MHz	Same	Same	Same			L101, 102, 103, on front end (2160013003)	Same	
8.	Monoural distortion	Same	Same	98MHz	60dB/ μ V	1000Hz ± 75 kHz deviation	Same	Distortion meter A.C. V.M. oscilloscope	Rec. output R-channel	Top (pri.) of T2 on IF unit (HUX-005A)	Minimum distortion	
9.	P.L.L. 19kHz	Same	Same	Same	Same	Same	Same	Frequency counter	T.P 1	VR.102 on MPX & Meter (ETC-212B)	76kHz ± 100 Hz	
10.	Stereo distortion	Same	FM SG and stereo modulator	Same	Same	Stereo modulation L-channel ± 67.5 kHz deviation pilot ± 7.5 kHz deviation	Same	Distortion meter A.C. V.M. oscilloscope	Fixed output L-channel	T-101 on front end (2160013003) T-1 on IF unit (HUX-005A)	Minimum distortion	
11.	Stereo separation	98MHz	FM SG. and stereo modulator	98MHz	60dB/ μ V	Stereo modulation L or R-channel ± 67.5 kHz deviation pilot ± 7.5 kHz deviation	Same	Same	Rec. output L or R-channel	VR. 101 on MPX. and Meter Unit (ETC-212B)	Maximum separation	

GR-535 POWER AMPLIFIER ALIGNMENT

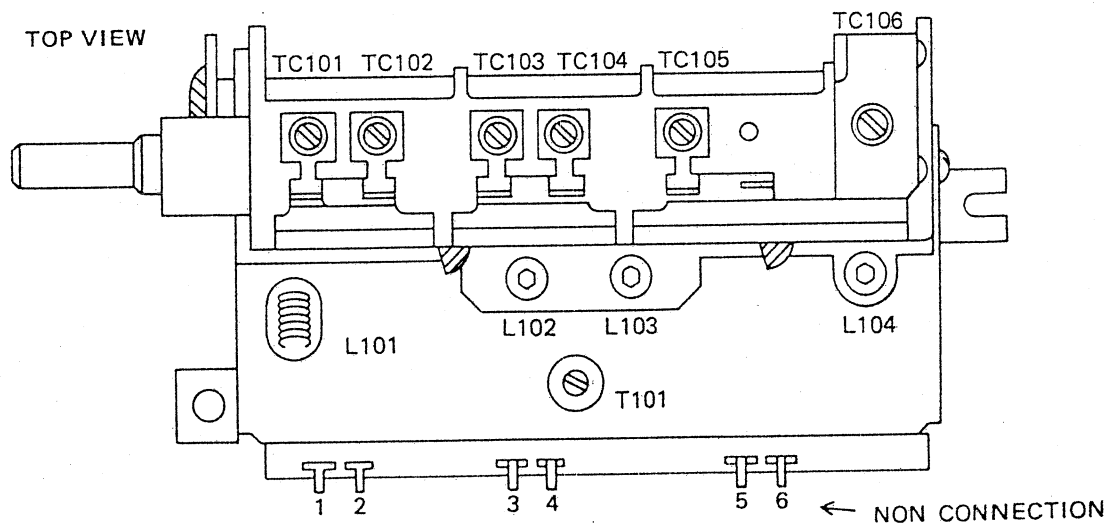
STEP	ITEM	UNIT	SIGNAL	SETTING		INDICATOR	ADJUST	ADJUSTING LIMITS	REMARKS	
1.	Center Potential	PUX-012B	No. signal	Short the MAIN-IN Coupler with the short pin.	SP-terminal A	SP-SWA: ON	Oscilloscope DC terminal	PUX-012B (L & R) VR-801	± 100 mV	Connect to SP-A terminal and ground.
2.	Power TR. Idleing Current	PUX-012B	No. signal	Short the MAIN-IN Coupler with the short pin.			Oscilloscope DC terminal	PUX-012B (L & R) VR-802	30mV \pm 5mV	Connect to Emitter of TR807 and Emitter of TR808.

THE VIEW OF THE FRONT END

GR-555 FRONT END (2160009004)

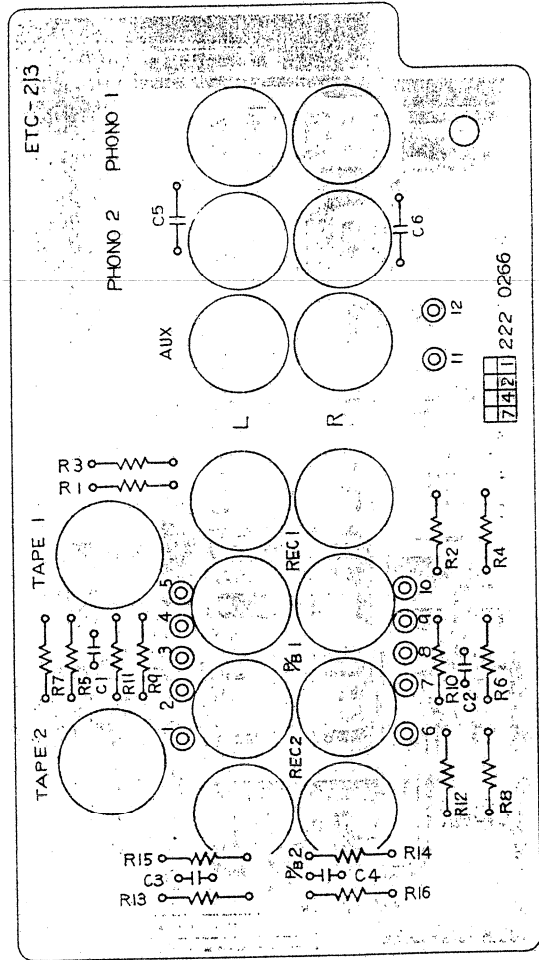
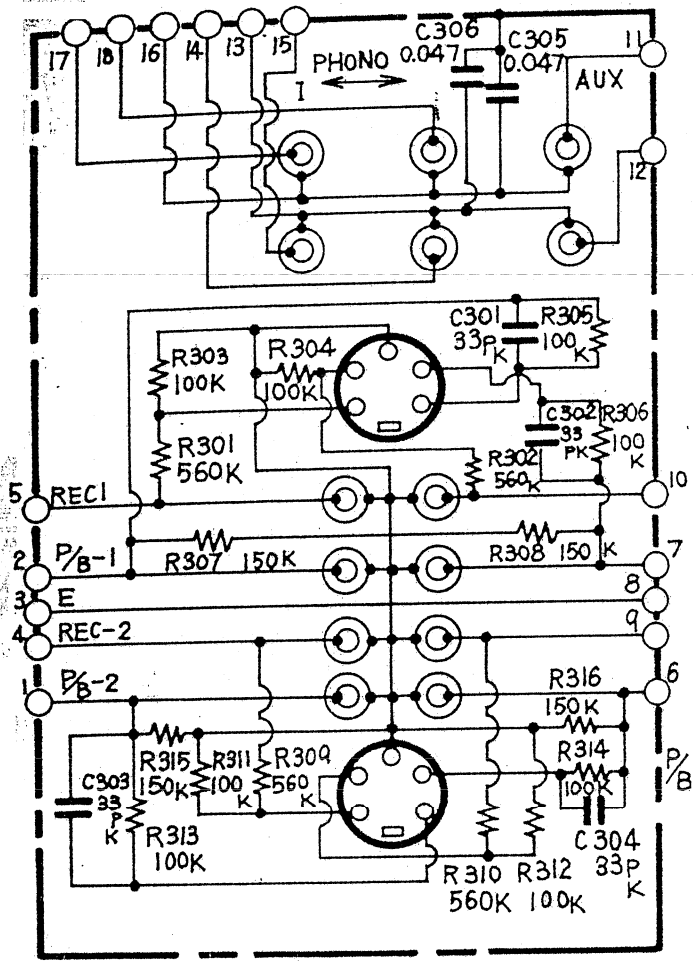


GR-535 FRONT END (2160013003)



PRINTED CIRCUIT BOARD PATTERNS, CIRCUIT DIAGRAMS AND PARTS LIST

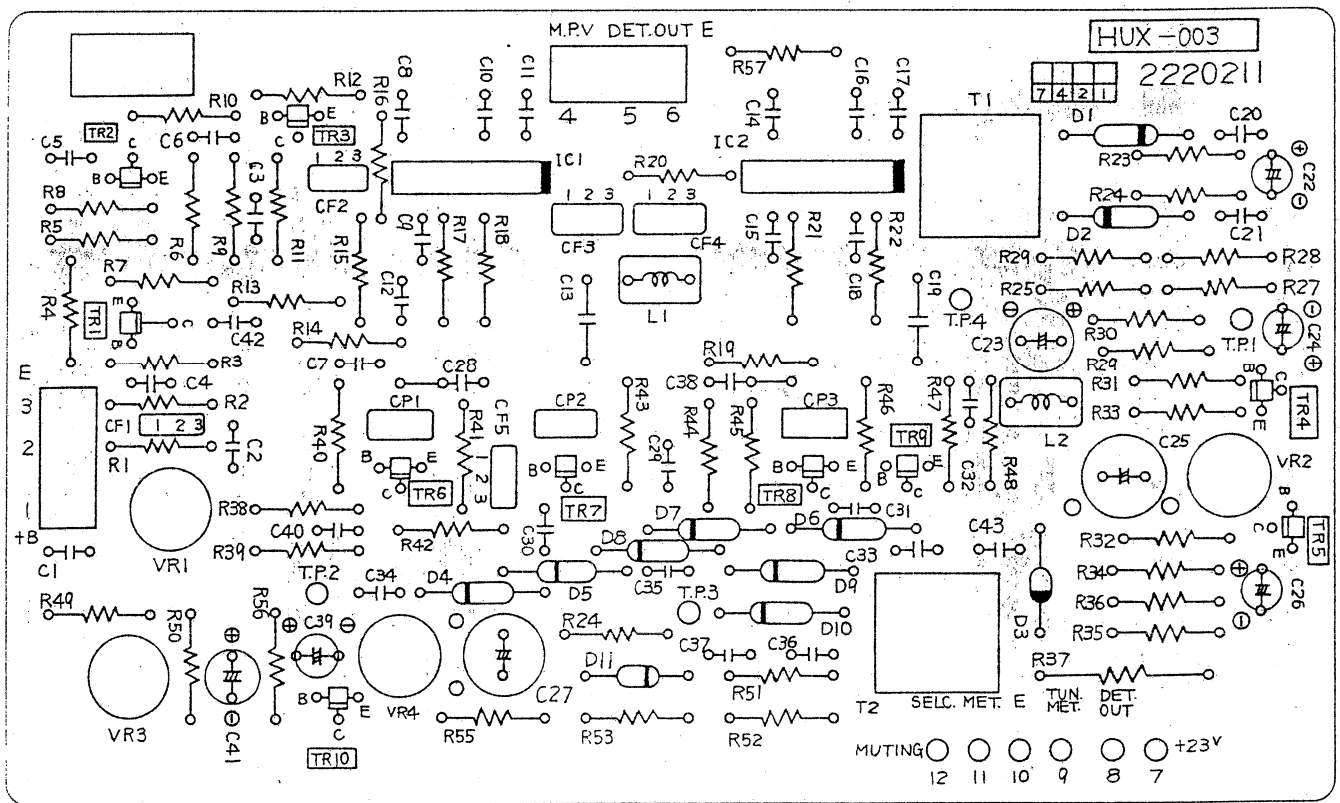
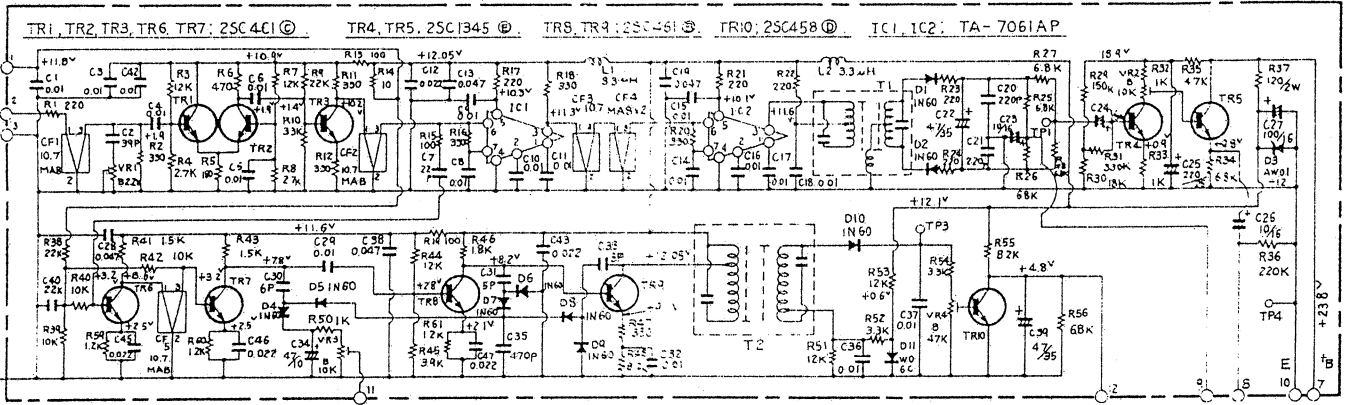
GR-555, GR-535 INPUT TERMINAL UNIT ETC-213



GR-555, GR-535 INPUT TERMINAL UNIT ETC-213

Ref. No.	Part No.	Descriptions	Ref. No.	Part No.	Descriptions
C1, 2, 3, 4	2533651005	33pF ±10% 50V CERAMIC CAPACITOR	R3, 4, 5, 6	2410362006	100 KOHM ±5% ¼W CARBON RESISTOR
C5, 6	2531026001	0.047 μF 50V CERAMIC CAPACITOR	11, 12, 13, 14	2410366002	150 KOHM ±5% ¼W CARBON RESISTOR
R1, 2, 9, 10	2410759004	560 KOHM ±5% ¼W CARBON RESISTOR	R7, 8, 15, 16		

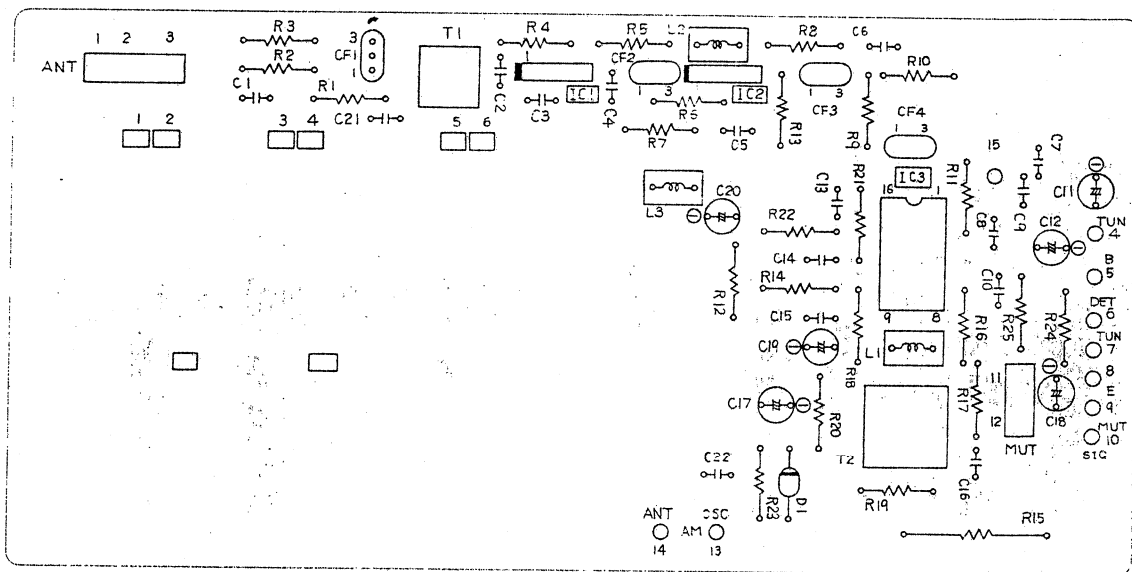
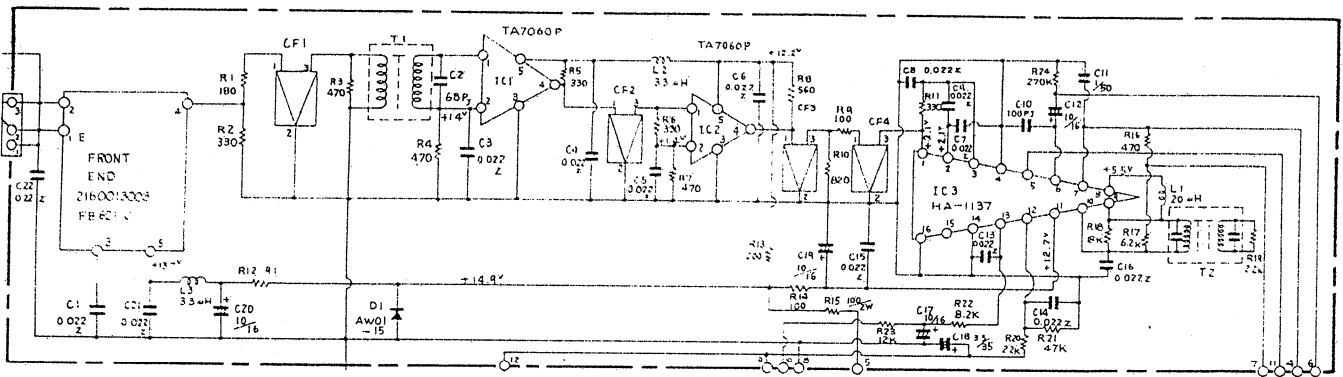
GR-555 IF UNIT OF FM SECTION HUX-003E



GR-555 IF UNIT OF FM SECTION HUX-003E

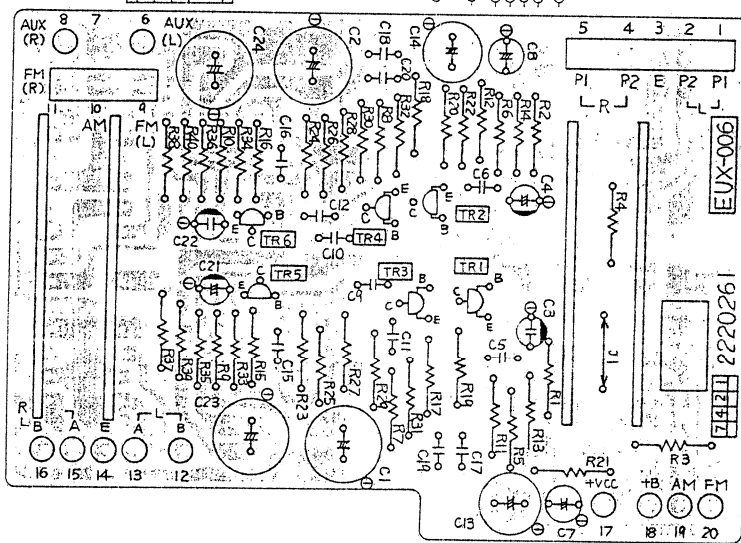
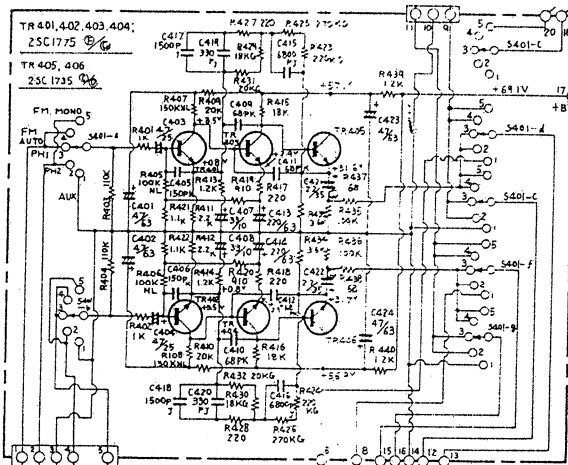
Ref. No.	Part No.	Descriptions	Ref. No.	Part No.	Descriptions
C1, 3, 4, 5, 6 8, 9, 10, 11 14, 15, 16, 17 18, 29, 32, 36 37, 40, 42 C2	2531024003	0.01 μ F 50V CERAMIC CAPACITOR	R14	2410266005	10 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C7	2533617007	39pF \pm 5% 50V CERAMIC CAPACITOR	R25, 26, 27 28, 34, 56	2410334005	6.8 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C13, 19, 28, 38	2533611003	22pF \pm 5% 50V CERAMIC CAPACITOR	R29	2410366002	150 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C20, 21	2531026001	0.047 μ F 50V CERAMIC CAPACITOR	R30	2410344008	18 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C22, 39	2533635005	220pF \pm 5% 50V CERAMIC CAPACITOR	R31	2410374007	330 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C23, 26	2544034006	4.7 μ F 35V ELECTROLYTIC CAPACITOR	R32, 33	2410314009	1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C24	2544015009	10 μ F 16V ELECTROLYTIC CAPACITOR	R35	2410330009	4.7 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C25	2544044009	1 μ F 50V ELECTROLYTIC CAPACITOR	R36	2410370001	220 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C27	2544029008	220 μ F 25V ELECTROLYTIC CAPACITOR	R37	2440087005	120 OHM \pm 5% 2W METAL OXIDE FILM RESISTOR
C30	2544018006	100 μ F 16V ELECTROLYTIC CAPACITOR	R39, 40, 42	2410338001	10 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C31	2533599002	6pF \pm 0.5pF 50V CERAMIC CAPACITOR	R41, 43	2410318005	1.5 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C33	2533598003	5pF \pm 0.5pF 50V CERAMIC CAPACITOR	R45	2410328008	3.9 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C35	2533596005	3pF \pm 0.25pF 50V CERAMIC CAPACITOR	R46	2410320006	1.8 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C34	2533643000	470pF \pm 5% 50V CERAMIC CAPACITOR	R48, 55	2410336003	8.2 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C12, 43, 45 46, 47	2544009002	47 μ F 10V ELECTROLYTIC CAPACITOR	R59, 60, 61	2410316007	1.2 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
R1, 17, 21, 22 23, 24	2531025002	0.022 μ F 50V CERAMIC CAPACITOR	VR1	EP-5462H9	SOLID VOLUME 2.2 KOHM
R2, 11, 12, 16 18, 20, 47	2410298002	220 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	VR2, 3	EP-5462H13	SOLID VOLUME 10 KOHM
R3, 7, 44, 51 53	2410302008	330 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	VR4	EP-5462H17	SOLID VOLUME 47 KOHM
R4, 8	2410340002	12 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	IC1, 2	2630019029	TA-7061AP INTEGRATED CIRCUIT
R5	2410324002	2.7 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	TR1, 2, 3, 6, 7	2730025023	2SC461 (C) TRANSISTOR
R6	2410296004	180 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	TR4, 5	2730116013	2SC1345 (E) TRANSISTOR
R9, 38	2410306004	470 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	TR8, 9	2730025010	2SC461 (B) TRANSISTOR
R10, 50, 52 54	2410346006	22 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	TR10	2730021043	2SC458 (D) TRANSISTOR
R13, 15, 19	2410326000	3.3 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	D1, 2, 4, 5, 6 7, 8, 9, 10	2760002029	IN60TV DIODE
	2410290000	100 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	D3	2760065008	AW01-12 DIODE
			D11	2760158025	W06C DIODE
			T1	2312001009	RATIO TRANS ASS
			T2	2312002105	FM IFT ASS
			CF1, 2, 3, 4, 5	2610008005	CERAMIC FILTER
			L1, 2	TRT09956	INDUCTOR 3.3 μ H

GR-535 IF UNIT OF FM SECTION HUX-005A



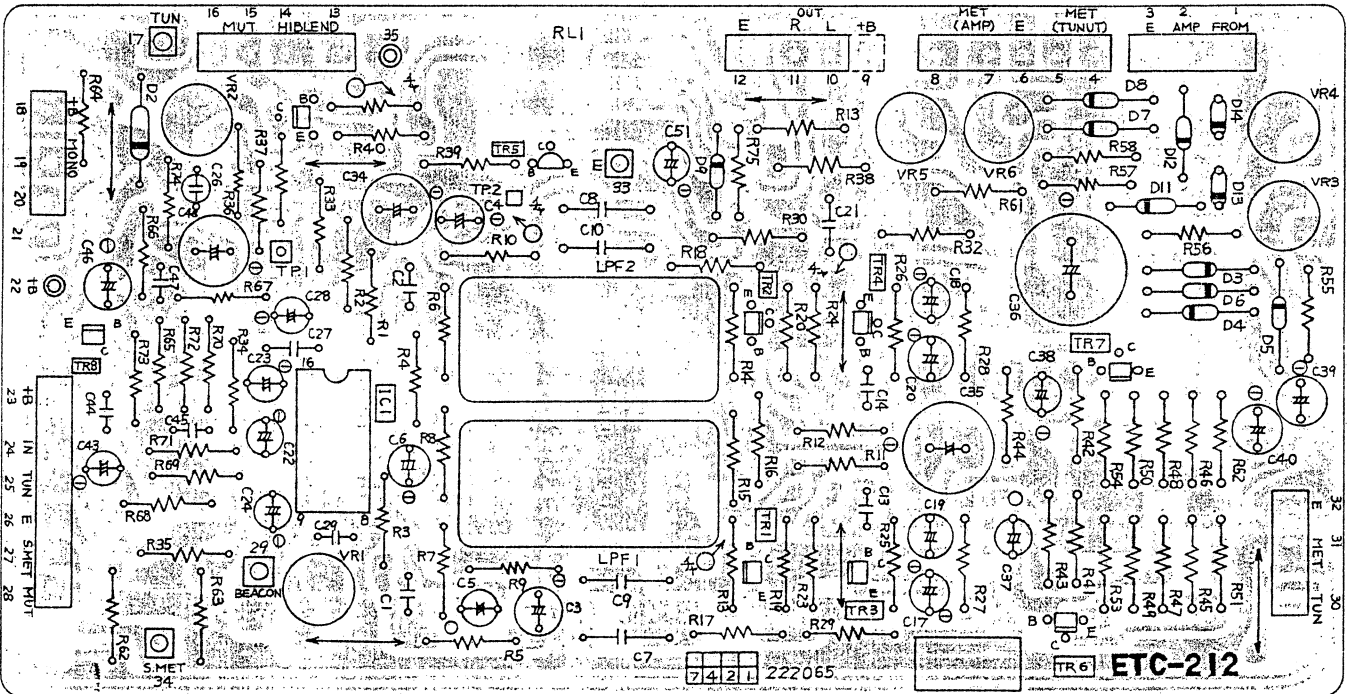
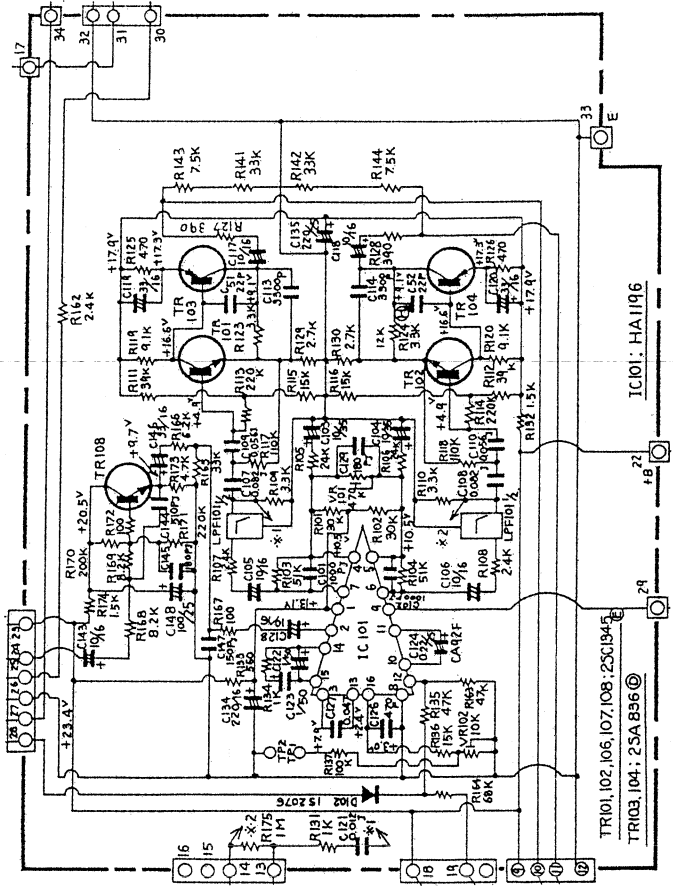
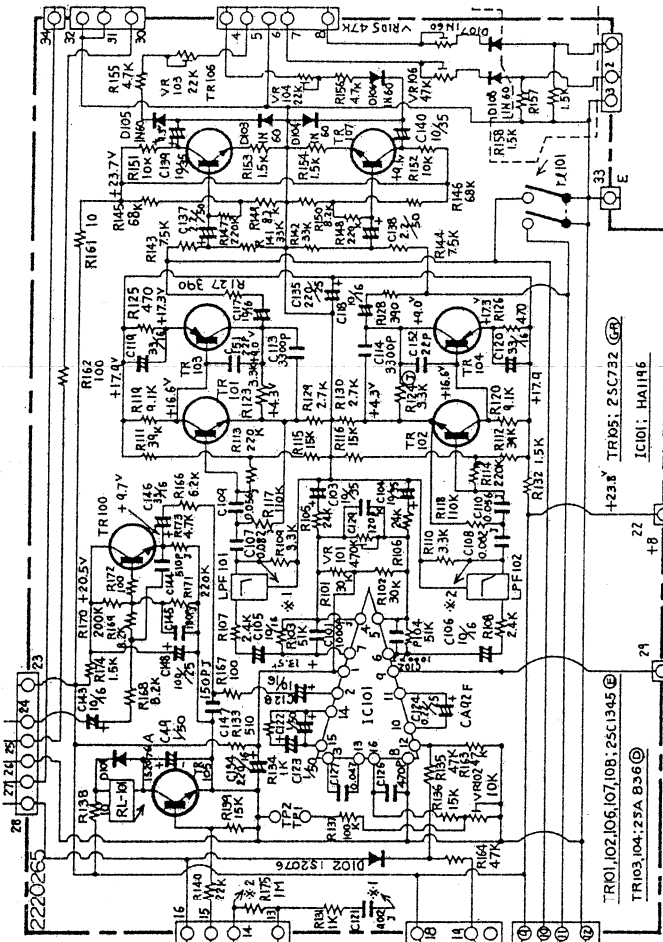
Ref. No.	Part No.	Descriptions	Ref. No.	Part No.	Descriptions
C1, 3, 4, 5, 6, 7, 8, 9, 13, 14, 15, 16, 21, 22	2531025002	0.022μF 50V CERAMIC CAPACITOR	R15	2440086006	100 OHM ±5% 2W METAL OXIDE FILM RESISTOR
C2	2533623004	68pF ±5% 50V CERAMIC CAPACITOR	R17	2410333006	6.2 KOHM ±5% 4W CARBON RESISTOR
C10	2533657009	100pF ±10% 50V CERAMIC CAPACITOR	R18	2410344008	18 KOHM ±5% ¼W CARBON RESISTOR
C11	2544044009	1μF 50V ELECTROLYTIC CAPACITOR	R19, 20	2410322004	2.2 KOHM ±5% ¼W CARBON RESISTOR
C12, 17, 19, 20	2544015009	10μF 16V ELECTROLYTIC CAPACITOR	R21	2410354001	47 KOHM ±5% ¼W CARBON RESISTOR
C18	2544033007	3.3μF 35V ELECTROLYTIC CAPACITOR	R22	2410336003	8.2 KOHM ±5% ¼W CARBON RESISTOR
R1	2410296004	180 OHM ±5% ¼W CARBON RESISTOR	R23	2410340002	12 KOHM ±5% ¼W CARBON RESISTOR
R2, 5, 6, 11	2410302008	330 OHM ±5% ¼W CARBON RESISTOR	R24	2410372009	270 KOHM ±5% ¼W CARBON RESISTOR
R3, 4, 7, 16	2410306004	470 OHM ±5% ¼W CARBON RESISTOR	R25	2410330009	4.7 KOHM ±5% ¼W CARBON RESISTOR
R8	2410308002	560 OHM ±5% ¼W CARBON RESISTOR	IC1, 2	2630031007	TA-7060P INTEGRATED CIRCUIT
R9, 14	2410290000	100 OHM ±5% ¼W CARBON RESISTOR	IC3	2630051003	HA-1137 INTEGRATED CIRCUIT
R10	2410312001	820 OHM ±5% ¼W CARBON RESISTOR	D1	2760067006	AW01-15 DIODE
R12	2410289008	91 OHM ±5% ¼W CARBON RESISTOR	L1	2312005018	INDUCTOR 20μH
R13	2410297003	200 OHM ±5% ¼W CARBON RESISTOR	L2, 3	TRT09956	INDUCTOR 3.3μH
			T1	2312006004	FM IFT
			T2	2312004006	IF DET TRANS
			CF1, 2, 3, 4	2610008005	CERAMIC FILTER
				2160013003	FRONT END

GR-555 GR-535
EQUALIZER AMP UNIT EUX-006



Ref. No.	Part No.	Descriptions	Ref. No.	Part No.	Descriptions
C1, 2, 23, 24	2544059023	47 μ F 63V ELECTROLYTIC CAPACITOR	R9, 10	2410345007	20 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C3, 4	2541024006	4.7 μ F \pm 20% 25V SOLID TANTALUM CAPACITOR	R11, 12	2410322004	2.2 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C5, 6	2533659007	150pF \pm 10% 50V CERAMIC CAPACITOR	R13, 14, 39, 40	2410316007	1.2 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C7, 8	2544008003	33 μ F 10V ELECTROLYTIC CAPACITOR	R15, 16	2410344008	18 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C9, 10, 11, 12	2533655001	68pF \pm 10% 50V CERAMIC CAPACITOR	R17, 18, 27, 28	2410298002	220 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C13, 14	2544004007	220 μ F 6.3V ELECTROLYTIC CAPACITOR	R19, 20	2410313000	910 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C15, 16	2551121009	0.0068 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	R21, 22	2410315008	1.1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C17, 18	2551120026	0.0015 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	R23, 24	2412018073	220 KOHM \pm 2% $\frac{1}{4}$ W CARBON RESISTOR
C19, 20	2533639001	330pF \pm 5% 50V CERAMIC CAPACITOR	R25, 26	2412012082	270 KOHM \pm 2% $\frac{1}{4}$ W CARBON RESISTOR
C21, 22	2541035011	2.2 μ F \pm 20% 35V SOLID TANTALUM CAPACITOR	R29, 30	2412018086	18 KOHM \pm 2% $\frac{1}{4}$ W CARBON RESISTOR
R1, 2	2410314009	1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	R31, 32	2412012053	20 KOHM \pm 2% $\frac{1}{4}$ W CARBON RESISTOR
R3, 4	2410363005	110 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	R33, 34	2410327009	3.6 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
R5, 6	2412016004	100 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	R35, 36	3410362006	100 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
R7, 8	2412016017	150 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	R37, 38	2410286001	68 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
			TR1, 2, 3, 4	2730158013	2SC1775 (F) TRANSISTOR
			TR5, 6	2730163008	2SC1735 (C) TRANSISTOR

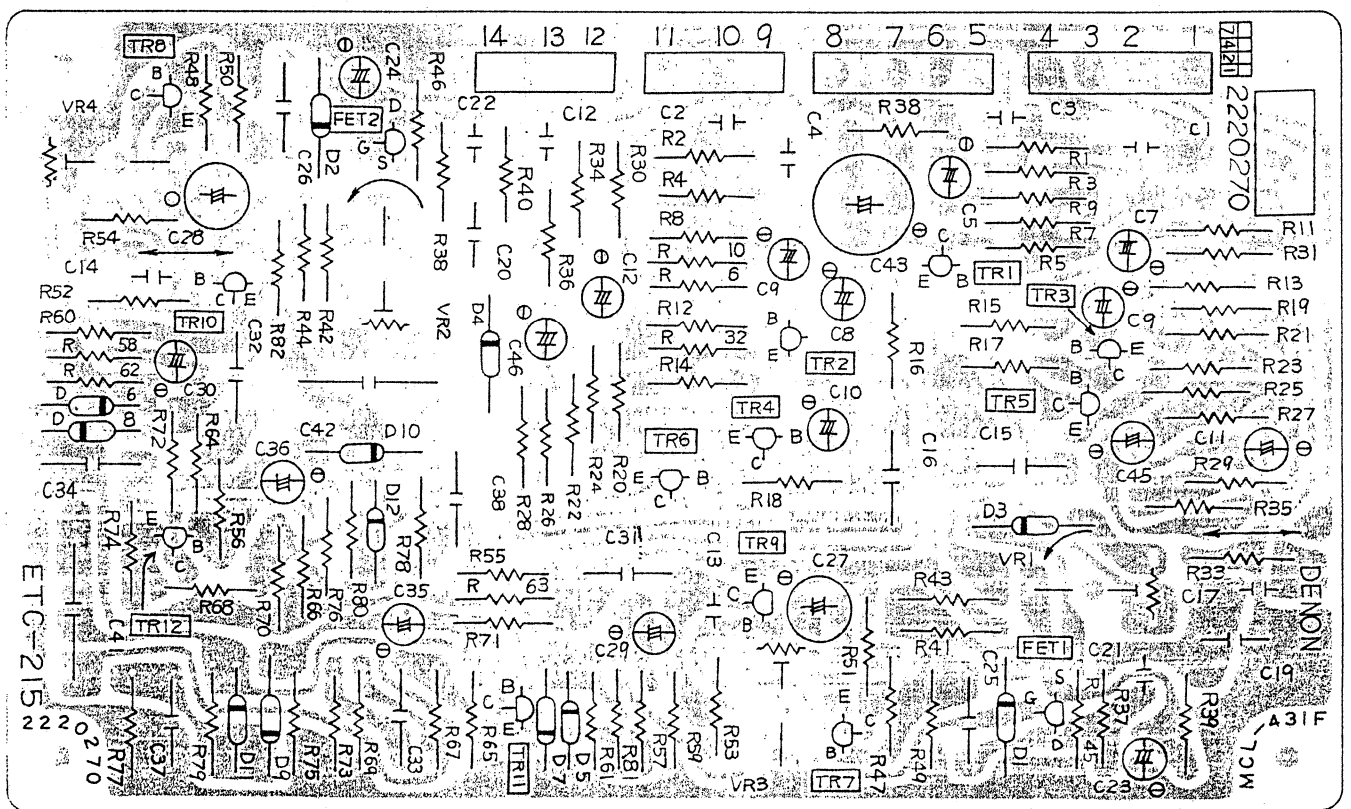
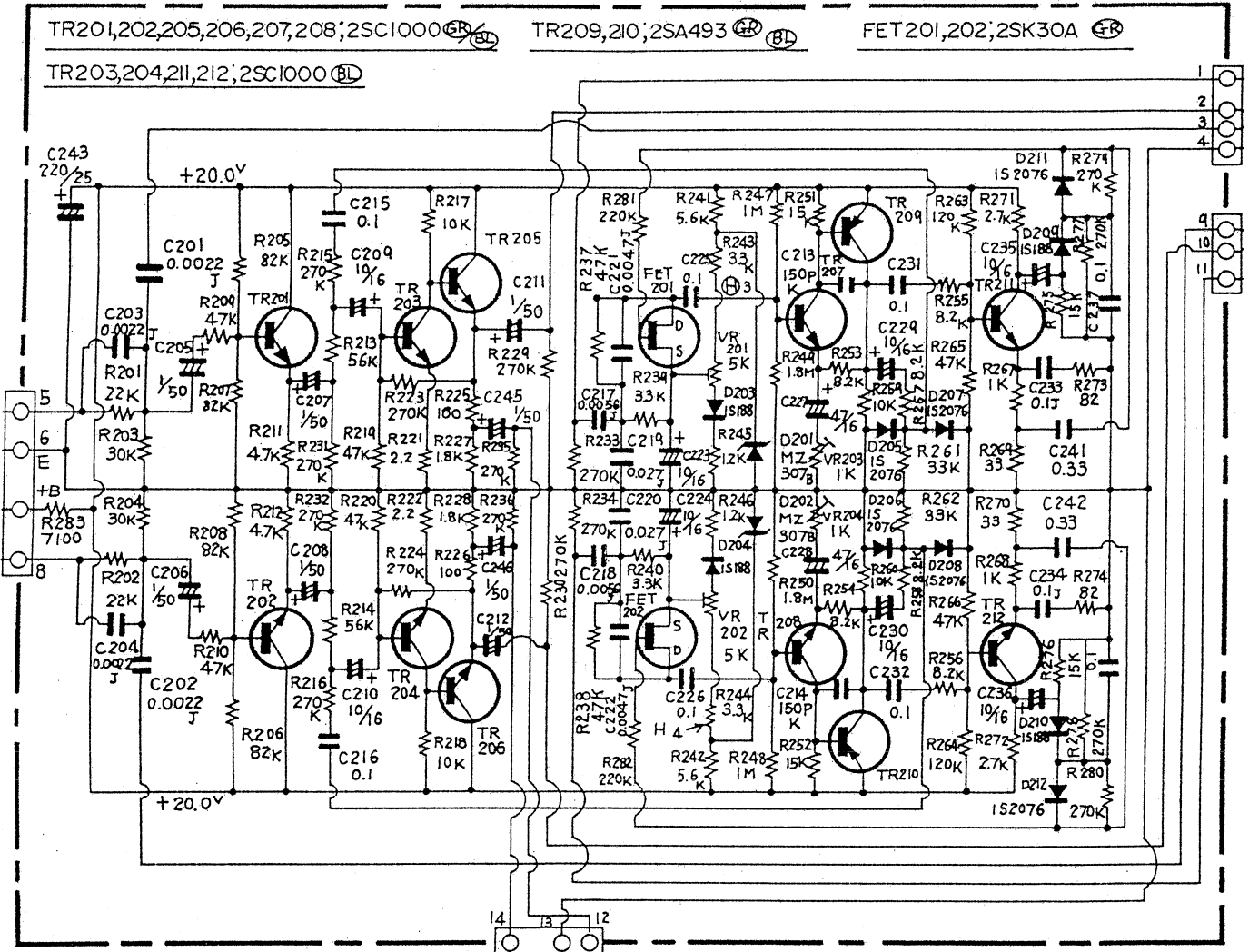
GR-555, GR-535 MPX & METER UNIT ETC-212 A & B



MPX & METER UNIT ETC-212A (GR-555) ETC-212B (GR-535)

	Ref. No.	Part No.	Descriptions		Ref. No.	Part No.	Descriptions
A B	C1, 2	2551120000	0.001 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	A B	R17, 18	2410363005	110KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A	C3, 4, 39, 40	2544035005	10 μ F 35V ELECTROLYTIC CAPACITOR	A B	R19, 20	2410337002	9.1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
B	C3, 4	2544035005	10 μ F 35V ELECTROLYTIC CAPACITOR	A B	R25, 26	2410306004	470 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C5, 6, 17, 18, 28, 43	2544015009	10 μ F 16V ELECTROLYTIC CAPACITOR	A B	R27, 28	2410304006	390 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C7, 8	2551122037	0.082 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	A B	R29, 30	2410324002	2.7 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C9, 10	2551122011	0.056 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	A	R31, 34	2410314009	1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C13, 14	2551066009	0.0033 μ F \pm 10% 50V PLASTIC CAPACITOR	B	R31, 34, 35	2410314009	1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C19, 20, 46	2544016008	33 μ F 16V ELECTROLYTIC CAPACITOR	A B	R32, 74, 53, 54	2410308005	1.5 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C21	2551121038	0.012 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	A	R33	2410307003	510 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C22, 23, 49	2544044009	1 μ F 50V ELECTROLYTIC CAPACITOR	B	R33	2410308002	560 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C24	2545016007	0.22 μ F \pm 20% 25V ALUMINIUM SOLID ELECTROLYTIC CAPACITOR	A	R40, 59, 60	2410346006	22 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C26	2556091008	470pF \pm 5% 50V PLASTIC FILM CAPACITOR	A	R38, 61	2410266005	10 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C27	2551080001	0.047 μ F \pm 10% 50V PLASTIC FILM CAPACITOR	A B	R41, 42,	2410350005	33 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A	C29	2533658008	120pF \pm 10% 50V CERAMIC CAPACITOR	A B	R43, 44	2410335004	7.5 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
B	C29, 45	2533633007	180pF \pm 5% 50V CERAMIC CAPACITOR	A	R45, 46	2410358007	68 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C34	2544019005	220 μ F 16V ELECTROLYTIC CAPACITOR	A	R51, 52	2410338001	10 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C35	2544029008	220 μ F 25V ELECTROLYTIC CAPACITOR	A	R55, 56, 73	2410330009	4.7 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A	C37, 38	2544066003	2.2 μ F 50V ELECTROLYTIC CAPACITOR	A	R62, 67, 72	2410290000	100 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A	C41, 42	2543014001	4.7 μ F \pm 20% 16V ELECTROLYTIC CAPACITOR	A B	R49, 68, 50, 69	2410336003	8.2 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C44	2533644009	510pF \pm 5% 50V CERAMIC CAPACITOR	A	R64, 35, 63	2410354001	47 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A	C45	2533633007	180pF \pm 5% 50V CERAMIC CAPACITOR	B	R64	2410358007	68 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C47	2533659007	150pG \pm 10% 50V CERAMIC CAPACITOR	A B	R66	2410333006	6.2 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C51, 52	2533649004	22pF \pm 10% 50V CERAMIC CAPACITOR	B	R67, 72	2410290000	100 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C48	2544028009	100 μ F 25V ELECTROLYTIC CAPACITOR	A B	R70	2410369009	200 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	R1, 2	2410349003	30 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	B	R73	2410330009	4.7 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	R3, 4	2410355000	51 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B	R75	2410765001	1 MOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	R5, 6	2410347005	24 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B	R36	2410342000	15 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A	R7, 8	2410323003	2.4 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A	TR1, 2, 6, 7, 8	2730116013	2SC1345 (E) TRANSISTOR
B	R7, 8, 62	2410323003	2.4 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	B	TR1, 2, 8	2730116013	2SC1345(E) TRANSISTOR
A B	R9, 10, 23, 24	2410326000	3.3 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B	TR3, 4	2710063005	2SC836(D) TRANSISTOR
A B	R11, 12	2410352003	39 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A	TR5	2730068019	2SC732 (GR) TRANSISTOR
A	R13, 14, 47, 48, 71	2410370001	220 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B	IC1	2630052002	HA-1196 INTEGRATED CIRCUIT
B	R13, 14, 71	2410370001	220 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A	D3, 4, 5, 6, 7, 8	2760002029	IN60 TV DIODE
A	R15, 16, 39	2410342000	15 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A	D2	2760049008	IS2076 DIODE
B	R15, 16, 36	2410342000	15 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	B	D1, 2	2760002029	IN60 TV DIODE
				A	D9	2760049011	IS2076A DIODE
				A	LPF1, 2	2320013005	LOW PASS FILTER
				B	LPF1	2320001004	LOW PASS FILTER
				A		2140015005	REED RELAY
				A	VRI	EP-5462H23	SOLID VOLUME 470 KOHM
				B	VRI	EP-5462H21	SOLID VOLUME 220 KOHM
				A B	VR2	EP-5462H13	SOLID VOLUME 10 KOHM
				A	VR3, 4	EP-5462H15	SOLID VOLUME 22 KOHM

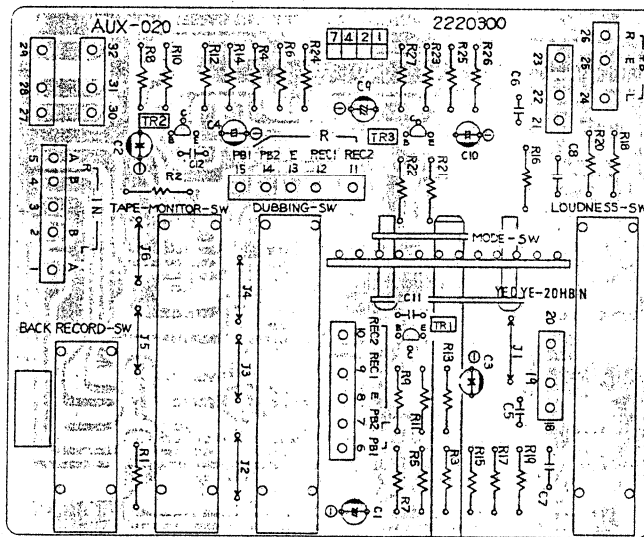
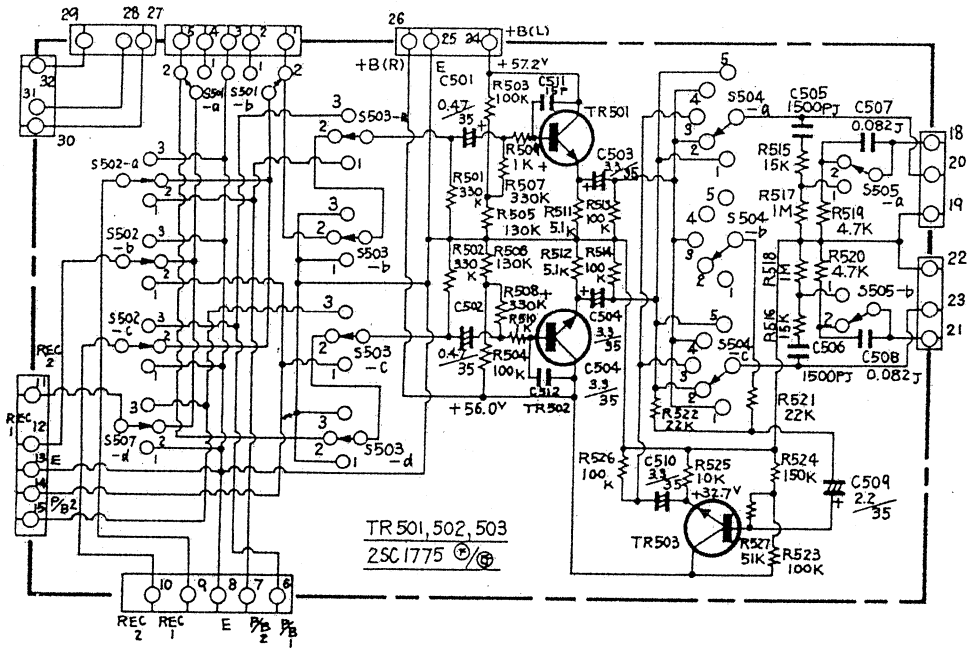
GR-555 DOLBY NR. UNIT ETC-215



DOLBY NR. UNIT ETC-215 (GR-555)

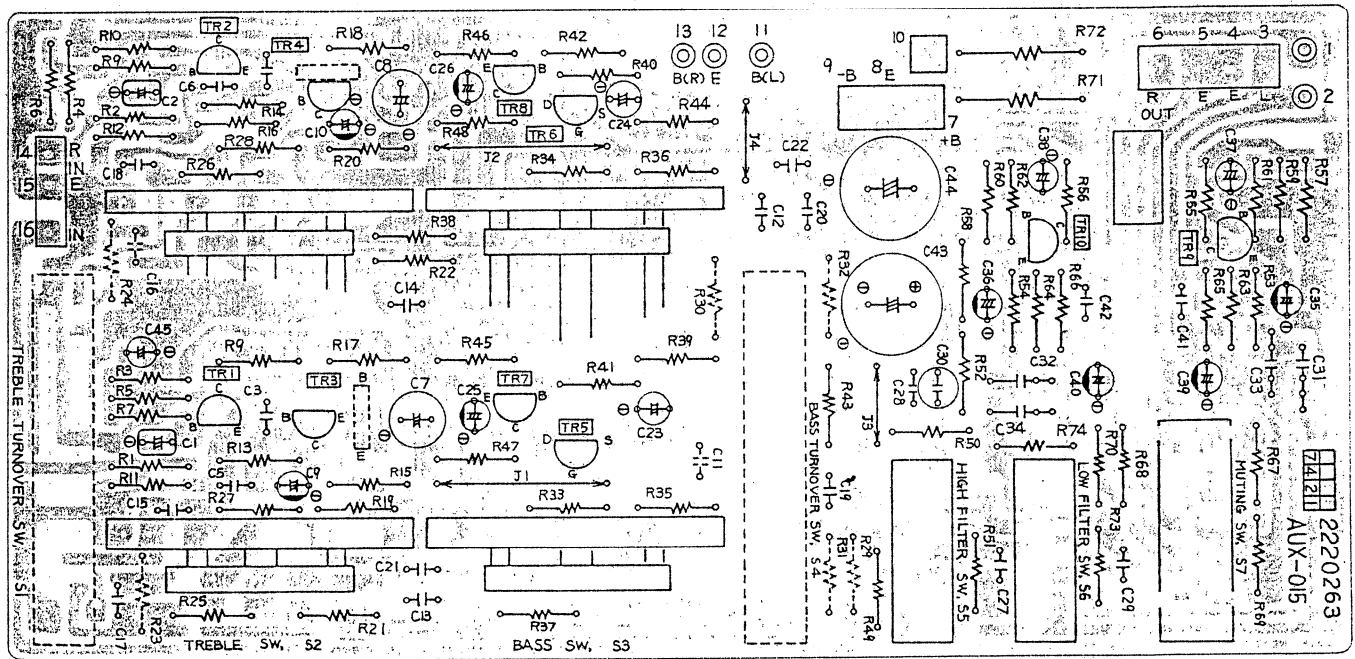
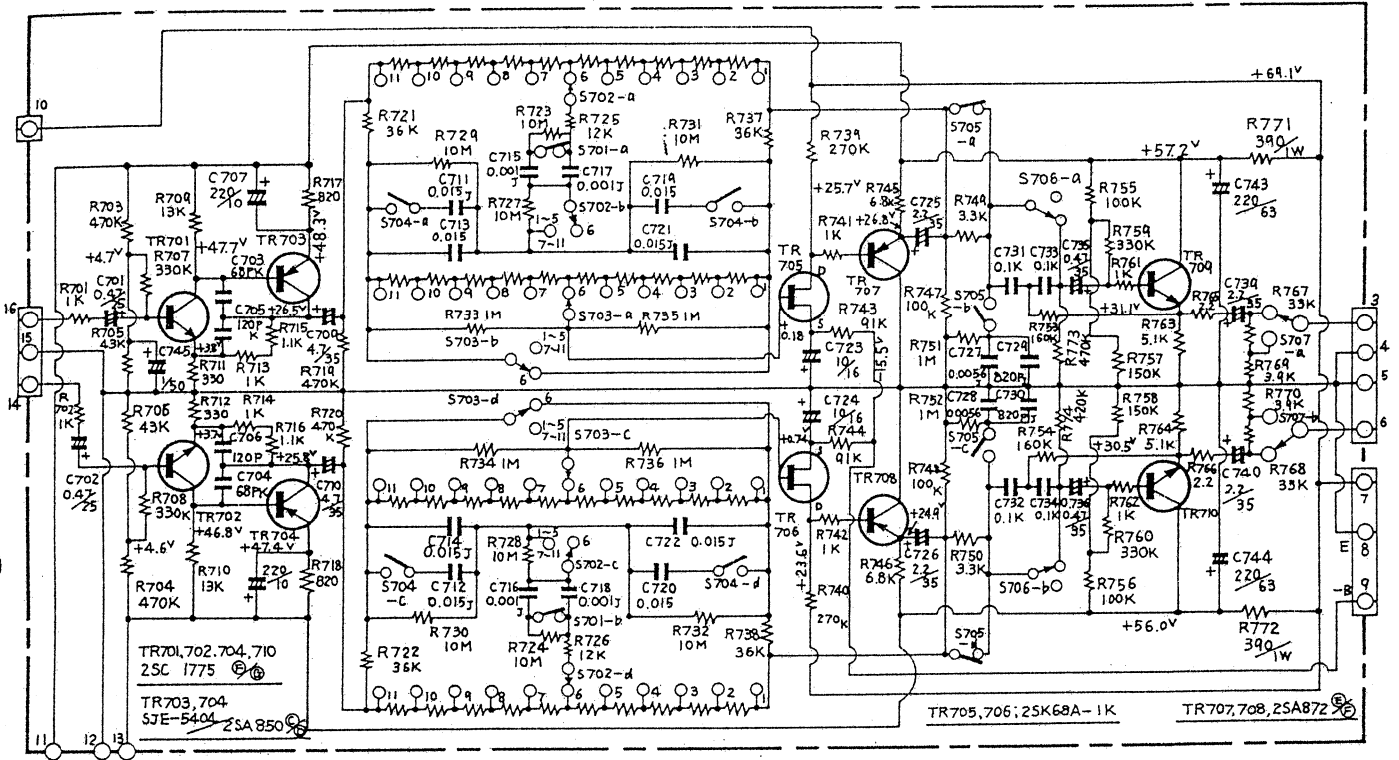
Ref. No.	Part No.	Descriptions	Ref. No.	Part No.	Descriptions
C1, 2, 3, 4	2551120042	0.0022 μ F \pm 5% 50V FILM CAPACITOR	R25, 26	2410311002	750 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C5, 6, 7, 8, 11 12, 45, 46	2544044009	1 μ F 50V ELECTROLYTIC CAPACITOR	R27, 28	2410315008	1.1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C9, 10, 23, 24 29, 30, 35, 36 C13, 14	2544015009	10 μ F 16V ELECTROLYTIC CAPACITOR	R39, 40	2410326000	3.3 K Ω HM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
	2533659007	150pF \pm 10% 50V CERAMIC CAPACITOR	R41, 42, 17, 18	2410332007	5.6 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C15, 16, 25, 26 31, 32, 37, 38 C17, 18	2551084007	0.1 μ F \pm 10% 50V PLASTIC FILM CAPACITOR	R43, 44	2410318005	1.5 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
	2551120097	0.0056 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	R45, 46	2410306004	470 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C19, 20	2551121070	0.027 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	R47, 48	2410765001	1 MOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C21, 22	2551120084	0.0047 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	R49, 50	2420194002	1.8 MOHM \pm 10% $\frac{1}{4}$ W CARBON RESISTOR
C27, 28	2544017007	47 μ F 16V ELECTROLYTIC CAPACITOR	R51, 52, 75, 76	2410342000	15 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C33, 34	2551122040	0.1 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	R53, 54, 55, 56 57, 58	2410336003	8.2 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C41, 42	2551141018	0.33 μ F \pm 10% 50V PLASTIC FILM CAPACITOR	R61, 62	2410350005	33 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C43	2544029008	220 μ F 25V ELECTROLYTIC CAPACITOR	R63, 64	2410364004	120 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
R1, 2	2410346006	22 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	R67, 68	2410314009	1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
R3, 4	2410349003	30 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	R69, 70	2410278006	33 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
R5, 6	2410366002	150 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	R71, 72	2410324002	2.7 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
R7, 8, 81, 82	2410370001	220 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	R73, 74	2410288009	82 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
R9, 10, 21, 22	2410298002	220 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	R83	2410290000	100 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
R11, 12	2410330009	4.7 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	VR1, 2	EP-74014	V10P B502 5 KOHM
R13, 14	2410356009	56 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	VR3, 4	EP-74011	V10P B102 1 KOHM
R15, 16, 23, 24 29, 30, 31, 32, 33, 34, 35, 36 77, 78, 79, 80 R59, 60	2410372009	270 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	TR1, 2, 5, 6 7, 8	2730098034	3SC1000 (GR) TRANSISTOR
	2410338001	10 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	TR3, 4, 11, 12	2730098018	2SC1000 (BL) TRANSISTOR
R19, 20, 37, 38 65, 66	2410354001	47 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	TR9, 10	2710012001	2SA493 (GR) TRANSISTOR
			FET1, 2	2750004024	2SK30A(GR) TRANSISTOR(FET)
			D1, 2	2760179004	MZ307 (B) DIODE
			D3, 4, 9, 10	2760022009	IS188 DIODE
			D5, 6, 7, 8, 11, 12	2760049008	IS2076 DIODE

GR-555, GR-535
PRE TONE CONTROL UNIT AUX-020



Ref. No.	Part No.	Descriptions	Ref. No.	Part No.	Descriptions
C9	2541031002	2.2 μ F \pm 20% 35V SOLID TANTALUM CAPACITOR	R15, 16	2410342000	15 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C1, 2	2541027003	0.47 μ F \pm 20% 35V SOLID TANTALUM CAPACITOR	R17, 18	2410765001	1 MOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C3, 4, 10	2541032001	3.3 μ F \pm 20% 35V SOLID TANTALUM CAPACITOR	R19, 20	2410330009	4.7 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C5, 6	2551120026	0.0015 μ F \pm 5% 50V PLASTIC CAPACITOR	R21, 22	2410346006	22 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C7, 8	2551122037	0.082 μ F \pm 5% 50V PLASTIC CAPACITOR	R24	2410366002	150 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
C11, 12	2533647006	15pF \pm 10% 50V CERAMIC CAPACITOR	R25	2410338001	10 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
R1, 2, 7, 8	2410374007	330 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	R27	2410355000	51 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
R5, 6	2410365003	130 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	TR1, 2, 3	2730158013	TRANSISTOR
R9, 10	2410314009	1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR		2120078114	LEVER SWITCH "DUBBING" "TAPE MONITOR"
R11, 12	2410331008	5.1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR		2124085006	LEVER SWITCH "LOUDNESS"
R3, 4, 13, 14, 23, 26	2410362006	100 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR		2124084010	LEVER SWITCH "BACK REC"
				2120097001	SWITCH "MODE"

GR-555, GR-535 TONE CONTROL UNIT AUX-015 A & B

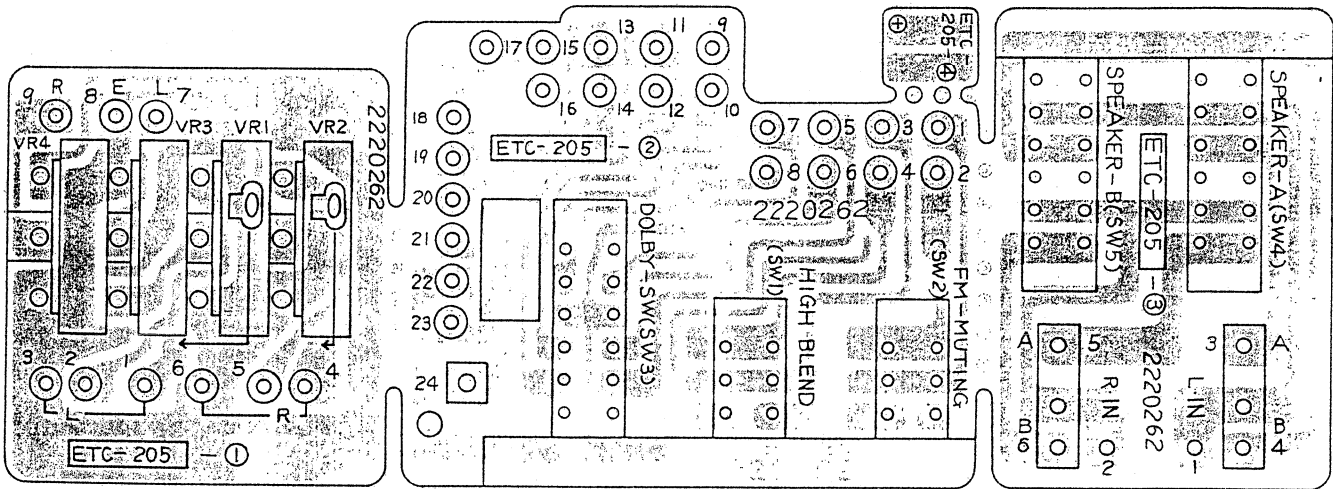
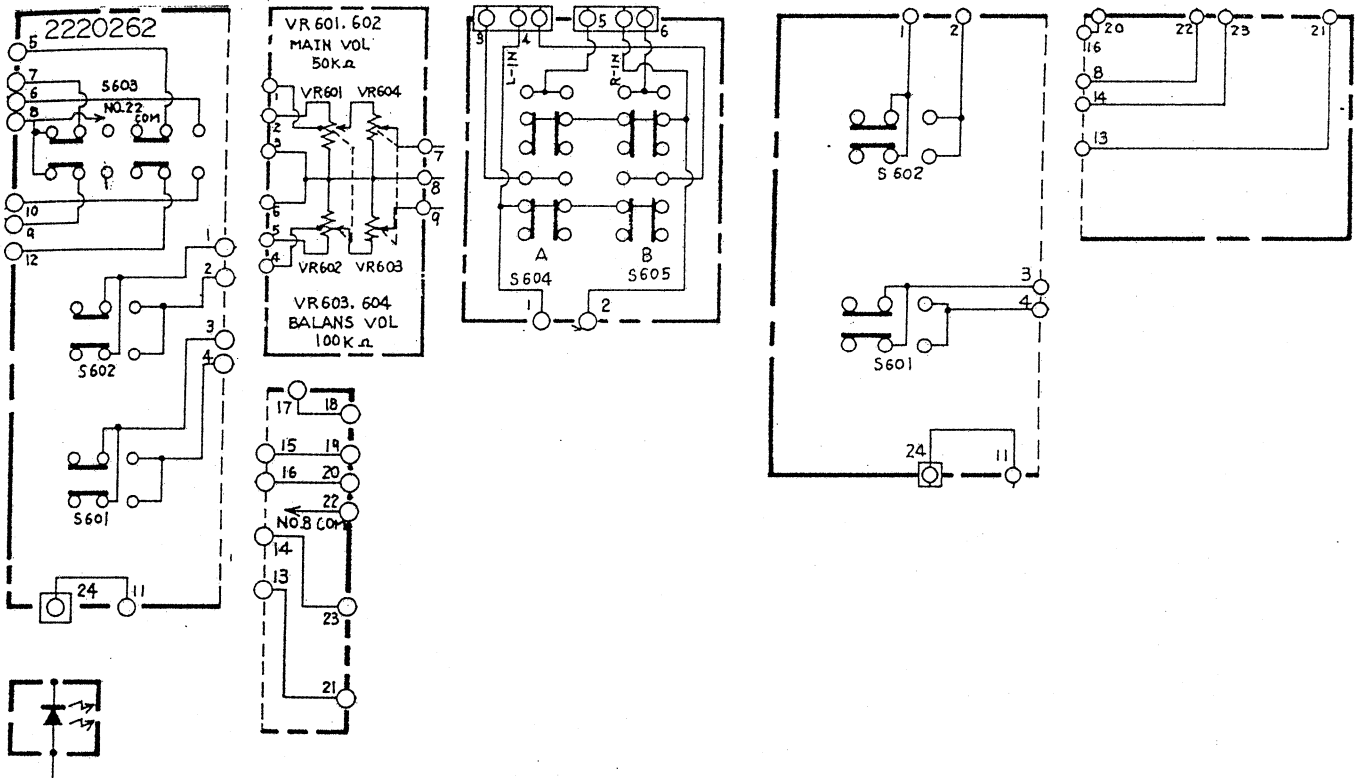


TONE CONTROL UNIT AUX-015A (GR-555)

AUX-015B (GR-535)

	Ref. No.	Part No.	Descriptions		Ref. No.	Part No.	Descriptions
A B	C1, 2	2545018005	0.47 μ F \pm 20% 25V ALUMI- NIUM SOLID ELECTRO- LYTIC CAPACITOR	A B	R15, 16	2410315008	1.1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C3, 4	2533655001	68 μ F \pm 10% 50V CERAMIC CAPACITOR	A B	R17, 18	2410312001	820 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C5, 6	2533658008	120pF \pm 10% 50V CERAMIC CAPACITOR	A B	R21, 22, 37, 38	2410351004	36 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C7, 8	2544011003	220 μ F 10V ELECTROLYTIC CAPACITOR	A	R23, 24, 27, 28	2420203003	10 MOHM \pm 10% $\frac{1}{4}$ W CARBON RESISTOR
A B	C9, 10	2541033000	4.7 μ F \pm 20% 35V SOLID TANTALUM CAPACITOR	A B	R25, 26, 69, 70	2410340002	12 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A	C11, 12, 13, 14	2551121041	0.015 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	B	R27, 28	2420203003	10 MOHM \pm 10% $\frac{1}{4}$ W CARBON RESISTOR
B	C13, 14, 21, 22	2551121041	0.015 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	A B	R33, 34, 35, 36, 51, 52	2410765001	1 MOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A	C15, 16, 17, 18	2551120000	0.001 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	A B	R39, 40	2410372009	270 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
B	C17, 18	2551120039	0.0018 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	A B	R43, 44, 67, 68	2410361007	91 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C23, 24	2544015009	10 μ F 16V ELECTROLYTIC CAPACITOR	A B	R45, 46	2410334005	6.8 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C25, 26	2541031002	2.2 μ F \pm 20% 35V SOLID TANTALUM CAPACITOR	A B	R47, 48, 55, 56	2410362006	100 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C27, 28	2551120097	0.0056 μ F \pm 5% 50V PLASTIC FILM CAPACITOR	A B	R49, 50	2410326000	3.3 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C29, 30	2556097002	820pF \pm 5% 50V PLASTIC FILM CAPACITOR	A B	R53, 54	2410367001	160 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C31, 32, 33, 34	2551084007	0.1 μ F \pm 10% 50V PLASTIC FILM CAPACITOR	A B	R57, 58	2410366002	150 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C35, 36	2541027003	0.47 μ F \pm 20% 35V SOLID TANTALUM CAPACITOR	A B	R63, 64	2410331008	5.1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C39, 40	2541035008	1 μ F \pm 20% 35V SOLID TANTALUM CAPACITOR	A B	R65, 66	2412010013	2.2 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B	C43, 44	2544059010	220 μ F 63V ELECTROLYTIC CAPACITOR	A B	R71, 72	2440036001	390 OHM \pm 5% 1W METAL OXIDE RESISTOR
A B	C45	2544044009	1 μ F 50V ELECTROLYTIC CAPACITOR	A B	TR1, 2, 9, 10	2730158013	2SC1775 (F) TRANSISTOR
A B	R1, 2, 13, 14	2410314009	1 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B	TR3, 4	2710072012	2SA850 (C) TRANSISTOR
A B	R3, 4, 19, 20	2410378003	470 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B	TR5, 6	2750017008	2SK68A-1K TRANSISTOR
A B	R5, 6	2410353002	43 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B	TR7, 8	2710070001	2SA872 (E) TRANSISTOR
A B	R7, 8, 59, 60	2410374007	330 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B	S3	2120098000	SWITCH "BASS"
A B	R9, 10	2410341001	13 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B	S2	2120099009	SWITCH "TREBLE"
A B	R11, 12	2410302008	330 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B	S7	2124084007	LEVER SWITCH "AUDIO MUTING"
				A B	S5, 6	2124087004	2P PUSH SWITCH "HIGH, LOW FILTER"
				A	S4	2124085006	LOWER SWITCH "TREBLE, BASS TORN OVER"

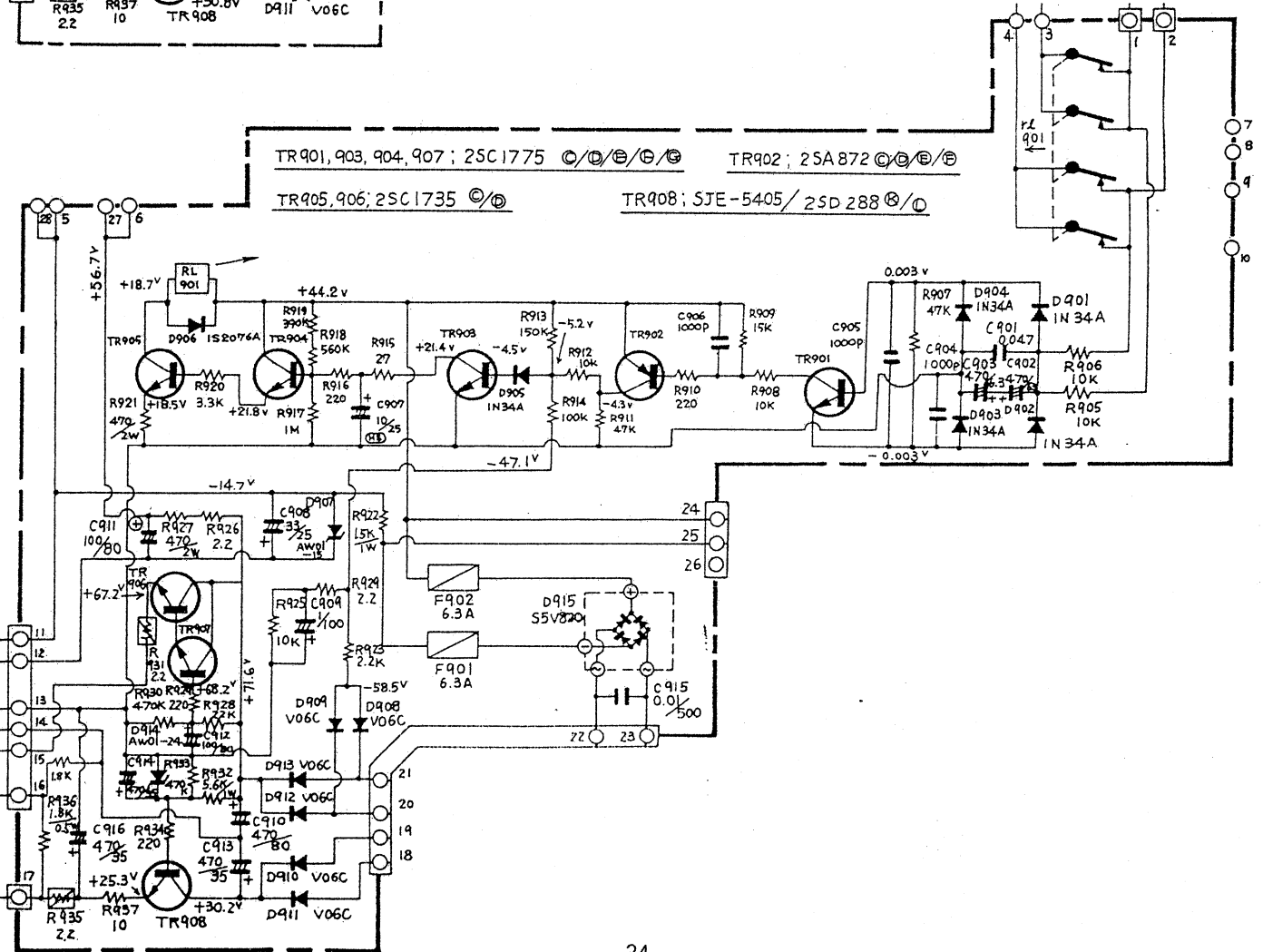
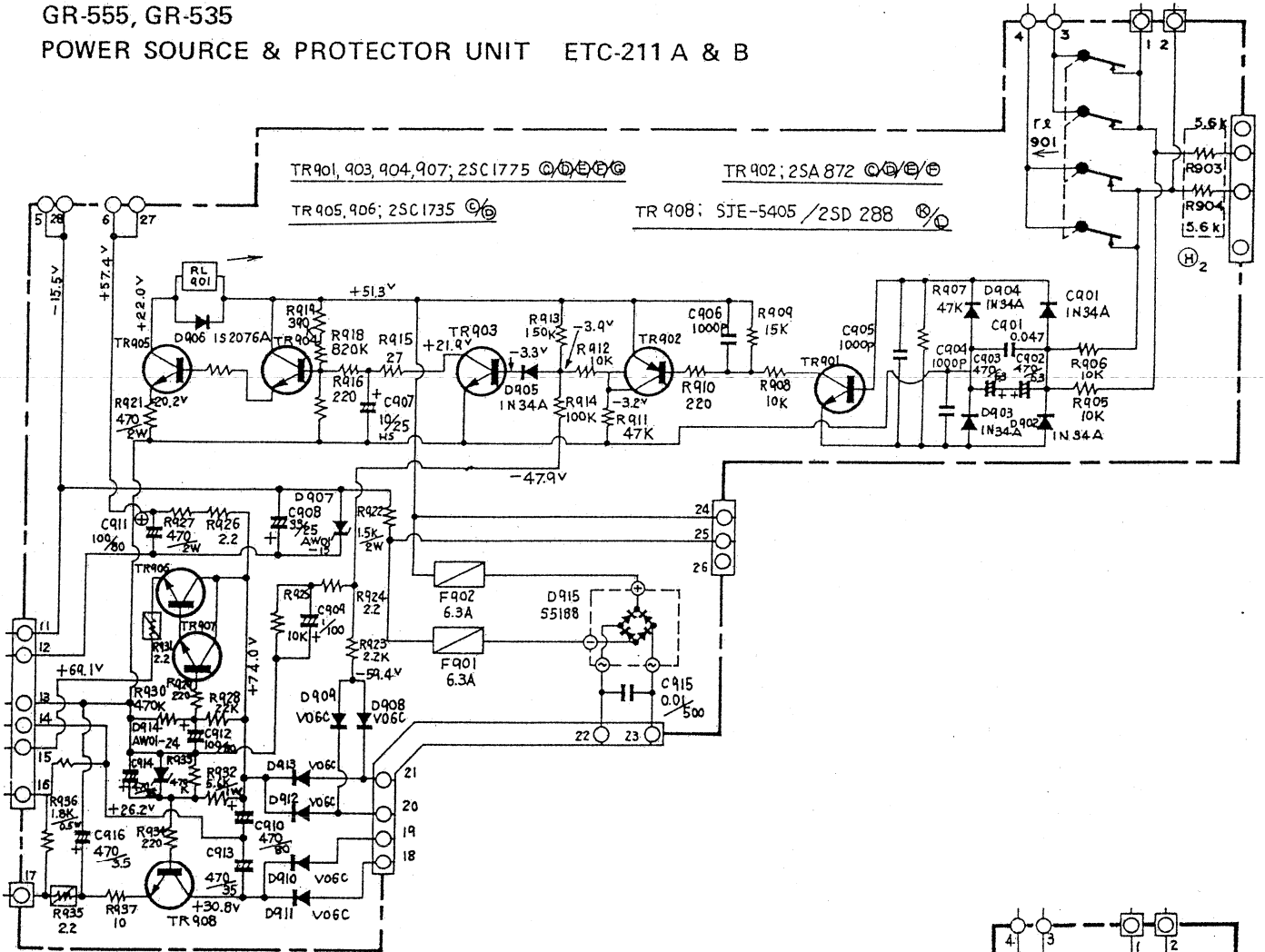
GR-555, GR-535 VOLUME & SWITCH UNIT ETC-205 A & B

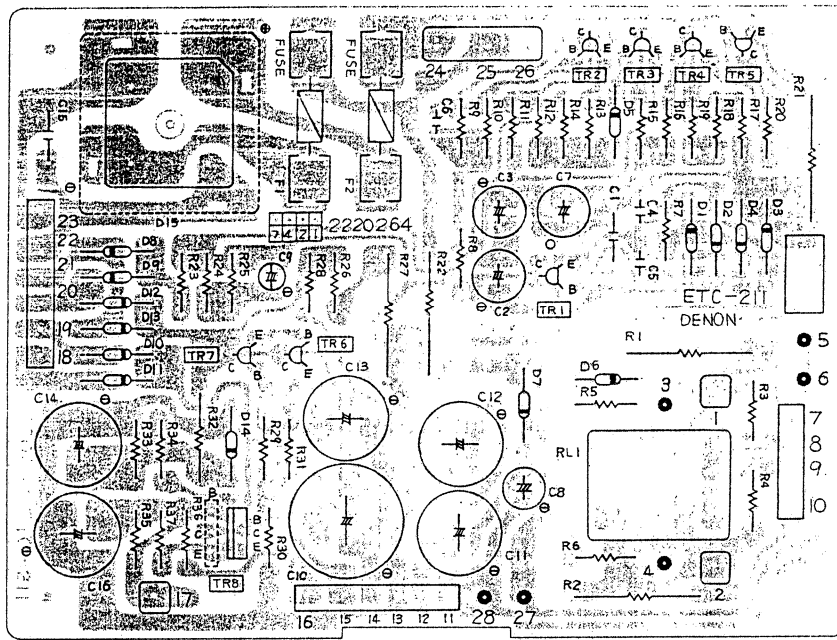


VOLUME & SWITCH UNIT ETC-205A (GR-555)
ETC-205B (GR-535)

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description	
A B 27, 24, 22	2110064002	V2422V35KW104=503- "LEVEL CONTROL, BALANCE"	A	SW1, 2, 3	2124089002	3P PUSH SWITCH "DOLBY, HIGH BLEND, FM MUTING"
A B SW4, 5	2124088003	2P PUSH SWITCH "SPEAKER A, B"	A B	R1, 2	2400900005	220 OHM ±5% 2W METAL OXIDE FILM RESISTOR

GR-555, GR-535
POWER SOURCE & PROTECTOR UNIT ETC-211 A & B





POWER SOURCE & PROTECTOR UNIT ETC-211A (GR-555) ETC-211B (GR-535)

Ref. No.	Part No.	Descriptions	Ref. No.	Part No.	Descriptions
A B C1	2531026001	0.047 μ F 50V CERAMIC CAPACITOR	B R18	2410759004	560 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B C2, 3	2544006005	470 μ F 6.3V ELECTROLYTIC CAPACITOR	A B R19	2410376005	390 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B C4, 5, 6	2531004007	0.001 μ F \pm 10% 50V CERAMIC CAPACITOR	A B R20	2410326000	3.3 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B C7	2549005030	10 μ F \pm 20% 25V ELECTROLYTIC CAPACITOR	A B R21, 27	2440094001	470 OHM \pm 5% 2W METAL OXIDE FILM RESISTOR
A B C8	2544026001	33 μ F 25V ELECTROLYTIC CAPACITOR	A B R22	2440100005	1.5 KOHM \pm 5% 2W METAL OXIDE FILM RESISTOR
A B C9	2544060025	1 μ F 100V ELECTROLYTIC CAPACITOR	A B R23	2410322004	2.2 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B C10	2546019003	470 μ F 80V ELECTROLYTIC CAPACITOR	A B R24, 26	2412010013	2.2 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B C11, 12	2544063006	100 μ F 80V ELECTROLYTIC CAPACITOR	A B R28	2410346006	22 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B C13, 14, 16	2544041002	470 μ F 35V ELECTROLYTIC CAPACITOR	A B R30, 33	2410378003	470 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B C15	2531038002	0.01 μ F \pm 10% 500V CERAMIC CAPACITOR	A B R31, 35	EP-6975	2.2 OHM \pm 5% $\frac{1}{4}$ W FOSEBLE RESISTOR
A B R3, 4	2410332007	5.6 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B R32	2440050003	5.6 KOHM \pm 5% 1W METAL OXIDE FILM RESISTOR
A B R5, 6, 8, 12, 25	2410338001	10 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B R36	2410191002	1.8 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B R7, 11	2410354001	47 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B R37	2410266005	10 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR
A B R9	2410342000	15 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B TR1, 3, 4, 7	2730158000	2SC1775 (D) TRANSISTOR
A B R10, 16, 29, 34	2410298002	220 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B TR2	2710070014	2SA872 (D) TRANSISTOR
A B R13	2410366002	150 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B TR5, 6	2730163008	2SC1735 (C) TRANSISTOR
A B R14	2410362006	100 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B TR8	2740028010	2SD288 (K) TRANSISTOR
A B R15	2410276008	27 OHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B D1, 2, 3, 4, 5	2760001004	IN34A DIODE
A B R17	2410765001	1 MOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B D6	2760049011	1S2076A DIODE
A R18	2410763003	820 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR	A B D7	2760067019	AW01-15A DIODE
			A B D8, 9, 10, 11, 12, 13	2760057016	V06C DIODE
			A B D14	2760071018	AW01-24 DIODE
			A D15	2760193006	S5188 DIODE
			B D15	2760195004	S5VB20 DIODE
			A B R38	2410320006	1.8 KOHM \pm 5% $\frac{1}{4}$ W CARBON RESISTOR

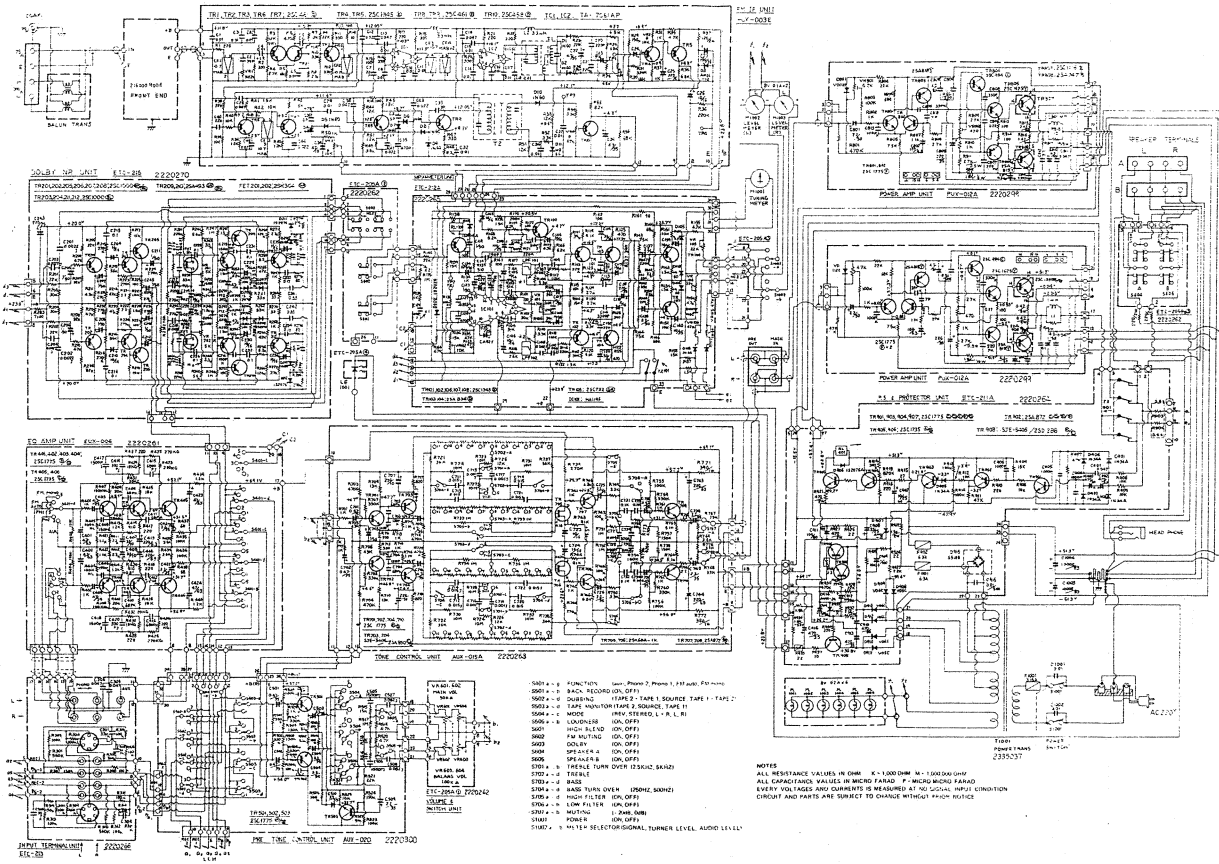
GR-555, GR-535

CHASSIS AND CABINET GROUP PARTS LIST GE-8002-1 (GR-555) GE-6002-1 (GR-535)

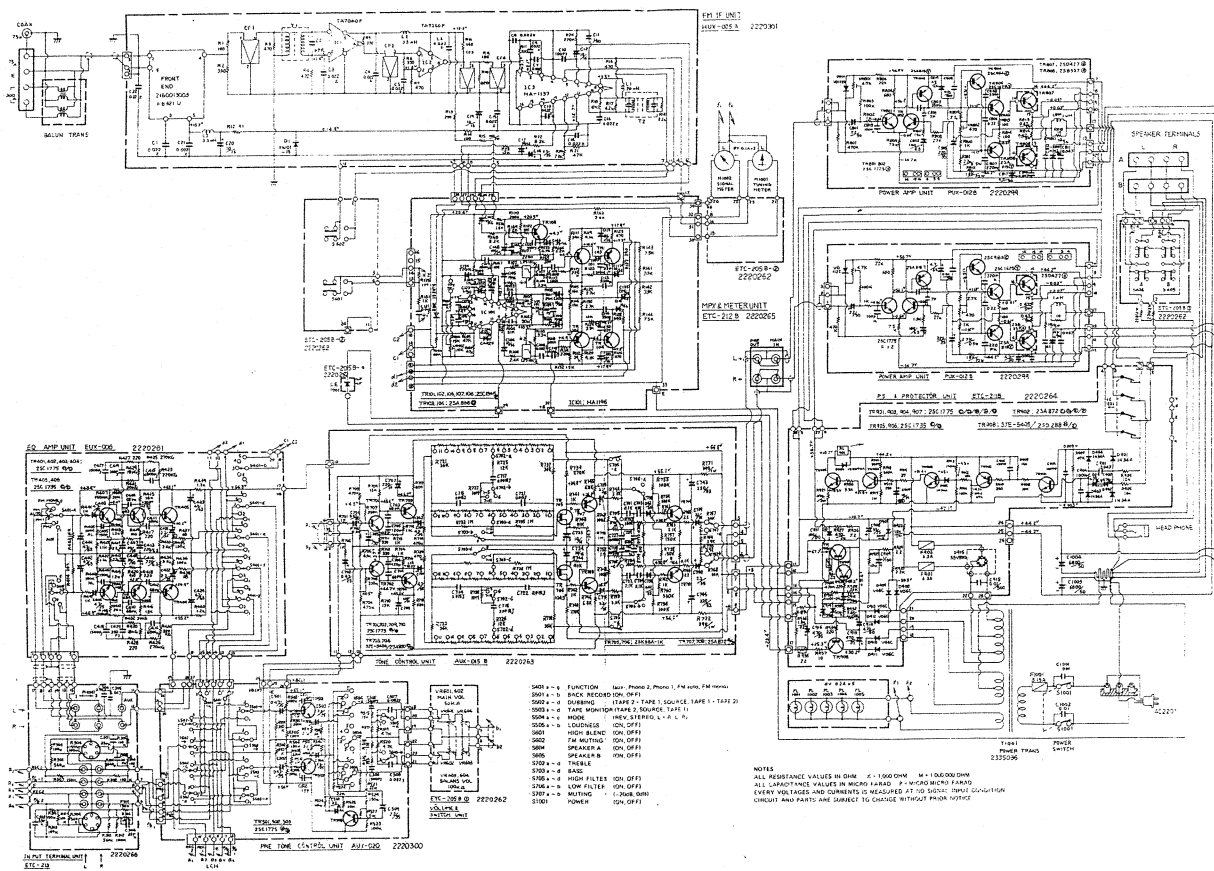
	Ref. No.	Part No.	Descriptions		Ref. No.	Part No.	Descriptions
A B		4110118202	FRONT CHASSIS	A B		4770018001	WASHER FOR GND
A B		4120310307	G.W. BRACKET ASS (A)				TERMINAL
A B		4220113100	DRIVING SHAFT ASS	A B		2050070004	8P TERMINAL ASS
A B		4120312108	G.W. BRACKET ASS (B)				"SPEAKER TERMINAL"
A B		4610066155	RUBBER SHEET	A B		2034085086	3P CONNECTOR CORD
A		2150025030	METER ASS "LEFT				"SPEAKER TERMINAL"
			LEVEL"	A B		2034085099	3P CONNECTOR CORD
A B		3930033005	PL 8V 0.1A <i>LAMPS</i>				"SPEAKER TERMINAL"
A		2150025043	METER ASS "RIGHT	A B		2048015107	4P WRAPPING PIN JACK
			LEVEL"				"PRE/MAIN AMP TERMINAL"
A B		4140091001	BLIND PLATE	A B		2036069000	4P CONNECTOR CORD
A B		MD-0131J	GUIDE WHEEL				"PRE/MAIN AMP
A B		SC-1161	TAPPING SCREW				TERMINAL"
A B		2220302007	P.C. BOARD "DIAL	A B		2034095005	3P CONNECTOR CORD
			SCALE ILLUMINATION"				"PRE/MAIN AMP
A B		3930016006	PILOT LAMP "DIAL				TERMINAL"
			SCALE" "TUNING	A B		2034095018	3P CONNECTOR CORD
			METER ILLUMINATION"				"PRE/MAIN AMP
A B		4510015206	REFLECTOR (A)				TERMINAL"
A		4510016205	REFLECTOR (B)	A B		4110112305	PA CHASSIS
A B		4530008109	POINTER RAIL	A B		2050076008	7P WRAPPING TERMINAL
A B		4230011001	STRING ϕ 0.55 TETRON				"CHASSIS EARTH"
A B		4630044005	TENSION SPRING	A B		2040054001	6P CONNECTOR ASS
A B		4110120300	TU CHASSIS	A B		EP-6552	4P WIRING TERMINAL
A B		MD-4601	P.C.B. SUPPORT	A B		2030121083	1P CONNECTOR CORD
A B		4120291012	IF BRACKET	A B		2020013004	FUSE HOLDER
A		2160009004	FM FRONT END ASS	A B		2061015074	FUSE (3.15A)
A		2034083020	3P CONNECTOR CORD	A B		4150089003	P.C.B. SUPPORT
			"FM FRONT END ASS"	A B		2034093007	3P CONNECTOR CORD
A		2036068001	4P CONNECTOR ASS	A		2335037005	POWER TRANS
A B		4120285109	SIDE BRACKET	A B		2034085044	3P CONNECTOR CORD
A		4140095104	SHIELD PLATE				"BLOCK CONDENSER"
A B		EP-4772	CORD HOLDER	A B		2034085057	3P CONNECTOR CORD
A		4120300204	SW BRACKET "METER				"BLOCK CONDENSER"
			SELECTOR"	A B		4170065104	POWER RADIATOR
A		2024086005	SLIDE SWITCH	A B		2070001105	T.R. SOCKET
			"METER SELECTOR"	A B		2034085060	3P CONNECTOR CORD
A B		2124049042	POWER SWITCH	A B		2034085073	3P CONNECTOR CORD
A		2150029007	TUNING METER ASS	A B		EP-6733	INSUL SHEET
A		1410069300	METER PLATE	A	TR8	2710061007	2SA747 (R) TRANSISTOR
A		1430076001	FILTER	A	TR7	2730144001	2SC1116 (R) TRANSISTOR
A		2034085031	3P CONNECTOR CORD	A B		4140093004	PLATE
			"TUNING METER ASS"	A B		4150092003	INSUL PLATE
A		1410065304	DIAL SCALE	A B		2006034007	AC CORD WITH PLUG
A B		2030072080	1P CONNECTOR (Q) ASS	A B		MD-2982H	CORD BUSH
A B		FEP-859	WIRE CONNECTOR (A)	A B		4450033005	WIRE CLAMP BAND
A B		4520025309	POINTER	A B		2050037005	SHORT PIN
A B		CF-7954J2	SPACER	A		1440266131	FRONT PANEL ASS
A B		4210082005	DIAL WHEEL	A B		4010060308	HINGE (R)
A B		4120305209	CONTROL BRACKET ASS	A		1440271139	FUNCTION PANEL
A		2034096004	3P CONNECTOR ASS	A B		4120315202	D.O. BRACKET
			"EUX-006"	A B		2124083008	PUSH SWITCH
A B		4220114019	JOINT SHAFT FOR MODE	A B		4020032201	MAGNET CATCH ASS
			SWITCH	A		1440278145	DOOR ASS
A B		4210124002	JOINT (A) "MODE	A B		4010057201	SHAFT (R)
			SWITCH"	A B		4010058103	SHAFT (L)
A B		4210132007	JOINT (B) "MODE	A B		4010059102	HINGE (L)
			SWITCH"	A B		CF-8616	BLIND SHEET
A B		2048008004	HEAD PHONE JACK	A		1130081105	SLIDE KNOB ASS
A		2036066003	4P CONNECTOR ASS				"METER SELECTOR"
			"HEAD PHONE JACK"	A B		1130075108	PUSH KNOB "POWER"
A		1050149237	BACK PANEL				"DOLBY" "HIGH BLEND"
A B		2050061000	4P TERMINAL "ANTENNA				"FM MUTING" "SPEAKER
			TERMINAL"				A, B" "LOW FILTER"
A B		2310017008	BALUN TRANS				"HIGH FILTER"
A B		2032055005	COAXIAL CONNECTOR	A B		1130034000	LEVER KNOB "AUDIO
			"75 OHM ANTENNA				MUTING" "TURN OVER"
			TERMINAL"				"LOUDNESS" "DUBBING"
A B		4770064107	FIXING SCREW				"MONITOR" "BACK RECORD"
A B		2050071003	TERMINAL ASS "GND	A B		1120136206	KNOB "BASS" "TREBLE"
			TERMINAL"				

to be continued

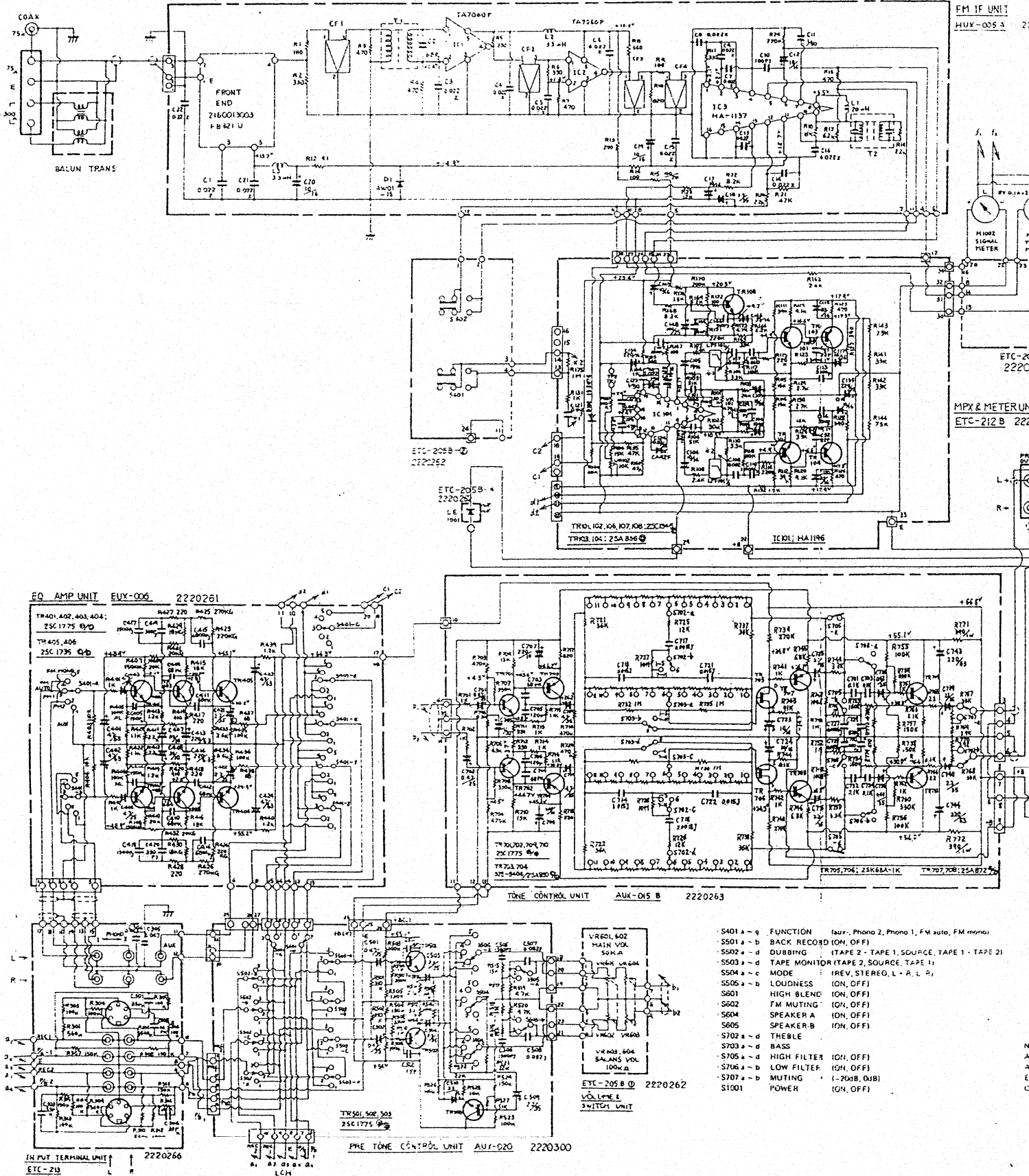
GR-555 WIRING DIAGRAM



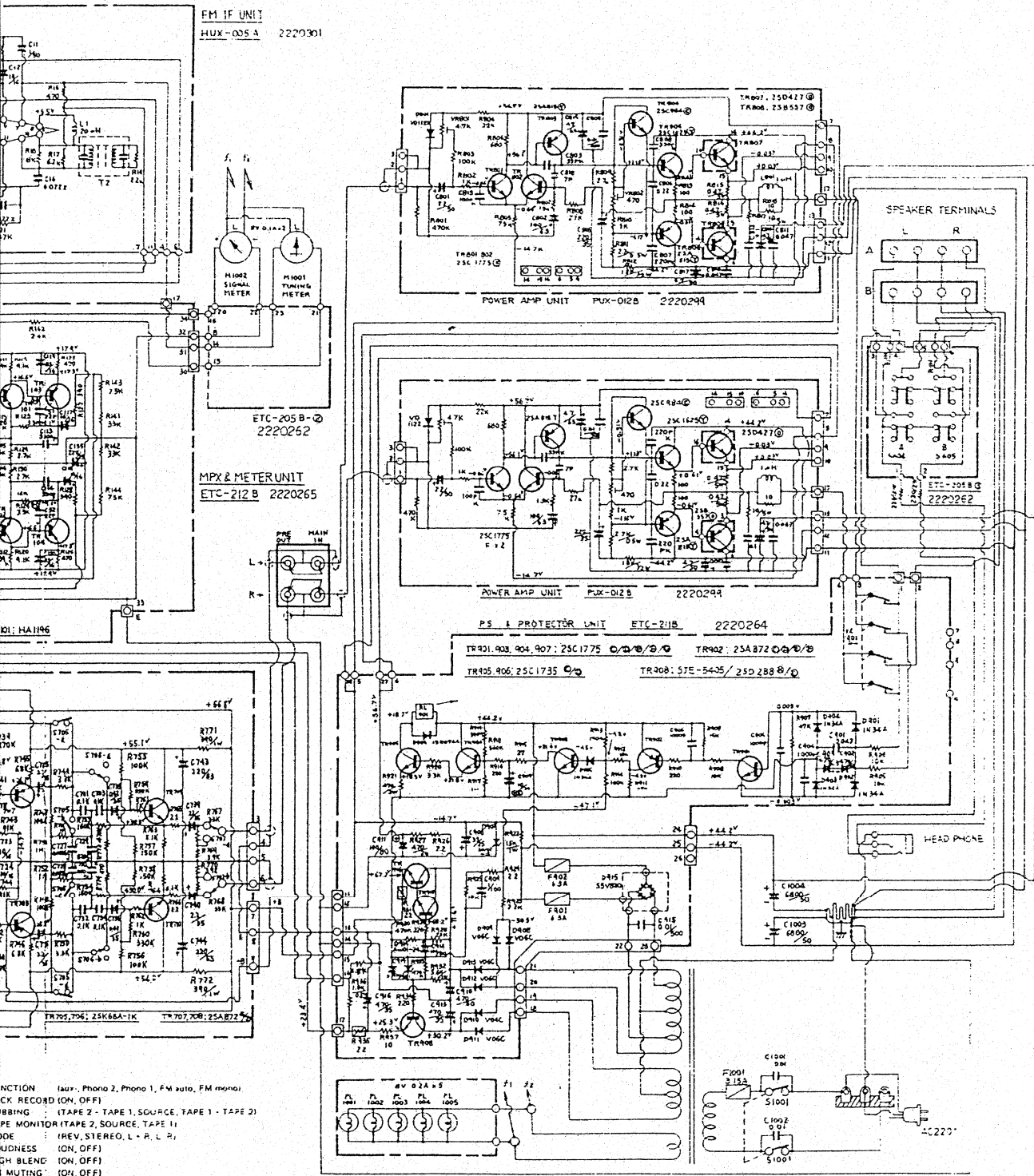
GR-535 WIRING DIAGRAM



GR-535 WIRING DIAGRAM

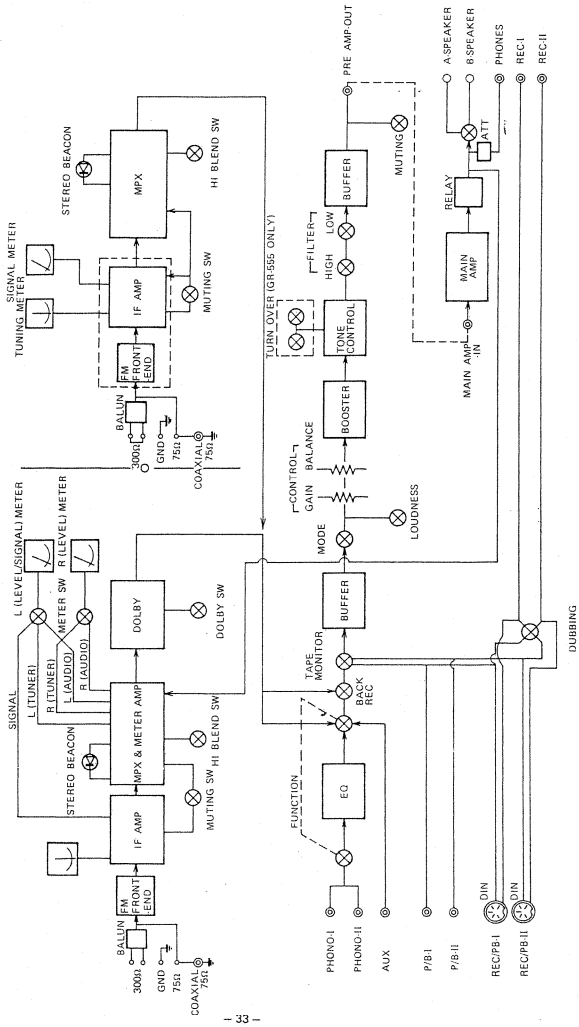


- S401 a - q FUNCTION (aux., Phono 2, Phono 1, FM auto, FM mono)
- S501 a - b BACK RECORD (ON, OFF)
- S502 a - d DUBBING (TAPE 2, TAPE 1, SOURCE, TAPE 1 - TAPE 2)
- S503 a - d TAPE MONITOR (TAPE 2, SOURCE, TAPE 1)
- S504 a - c MODE (REV, STEREO, L - R, L)
- S505 a - b LOUDNESS (ON, OFF)
- S601 HIGH BLEND (ON, OFF)
- S602 FM MUTING (ON, OFF)
- S604 SPEAKER A (ON, OFF)
- S605 SPEAKER B (ON, OFF)
- S702 a - d TREBLE
- S703 a - d BASS
- S705 a - d HIGH FILTER (ON, OFF)
- S706 a - b LOW FILTER (ON, OFF)
- S707 a - b MUTING (1-20dB, 0dB)
- S1001 POWER (ON, OFF)



- FUNCTION (aux., Phono 2, Phono 1, FM auto, FM mono)
- CK RECORD (ON, OFF)
- TUNING INDICATOR (ON, OFF)
- RECORDING (TAPE 2 - TAPE 1, SOURCE, TAPE 1 - TAPE 2)
- PE MONITOR (TAPE 2, SOURCE, TAPE 1)
- MODE (REV. STEREO, L - R, L R)
- BASS (ON, OFF)
- TREBLE (ON, OFF)
- MUTE (ON, OFF)
- MUTING (ON, OFF)
- AMPLIFIER A (ON, OFF)
- AMPLIFIER B (ON, OFF)
- BLEND (ON, OFF)
- PHONO FILTER (ON, OFF)
- FM FILTER (ON, OFF)
- TESTING (1-20dB, 0dB)
- POWER (ON, OFF)

NOTES
 ALL RESISTANCE VALUES IN OHM K = 1,000 OHM M = 1,000,000 OHM
 ALL CAPACITANCE VALUES IN MICRO FARAD P = MICRO MICRO FARAD
 EVERY VOLTAGES AND CURRENTS IS MEASURED AT NO SIGNAL INPUT CONDITION
 CIRCUIT AND PARTS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE



1 33 1

Ref. No.	Part No.	Descriptions	Ref. No.	Part No.	Descriptions
A	1120138217	"MODE"	B	2034094006	3P CONNECTOR ASS "EUX-006"
A	1120139106	KNOB "FUNCTION"	B	2036067002	4P CONNECTOR CORD "HEAD PHONE JACK"
B	1120138204	"BALANCE"	B	1050149240	BACK PANEL
A	1120138204	KNOB "LEVEL CONTROL"	B	2034074013	3P CONNECTOR CORD "75 OHM ANTENNA"
A	1120137205	TUNING KNOB "DIAL TUNING"	B		TERMINAL
A	1050148306	BOTTOM COVER (A)	B	2335036006	POWER TRANS
A	1040027107	FOOT	B	2720024005	2S857 (O) TRANSISTOR
A	4150054009	CLIP	B	TR7	25D427 (O) TRANSISTOR
A	1050156107	BOTTOM COVER (B)	B	1440266144	FRONT PANEL ASS
A	1020047107	TOP COVER	B	1440271142	FUNCTION PANEL
A	1020048203	SIDE COVER	B	1440278158	DOOR ASS
A	1010390202	CABINET ASS	A	2518001007	0.01μF ±20% 450V AC OIL CAPACITOR
A	SC-1162	SPECIAL SCREW	A	C3, 4	"POWER SWITCH"
B	2150025069	METER ASS "TUNING METER"	A	2546024001	1000μF 63V ELECTROLYTIC CAPACITOR
B	2150025056	METER ASS SIGNAL METER"	B	2546007002	6800μF 50V ELECTROLYTIC CAPACITOR
B	1410066303	DIAL SCALE	B	C3, 4	

3