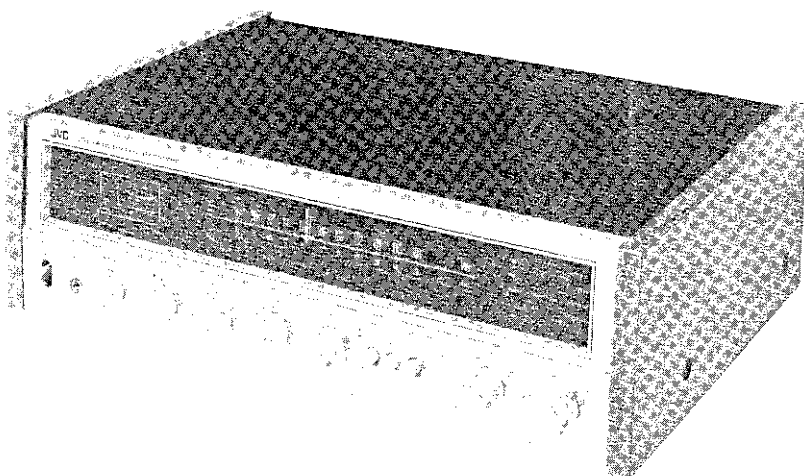




No. 2309

SERVICE MANUAL



MODEL VR-5505

FM/AM STEREO RECEIVER

DIMENSIONS : H — 5 $\frac{3}{4}$ " , W — 18 $\frac{1}{4}$ " , D — 13"

WEIGHT : 17.6 lbs.

SPECIFICATIONS

Type : FM/AM stereo receiver
FET : 1
Transistor : 31
Diode : 33

FM Tuner Section

Tuning Range : 88 — 108MHz
Sensitivity : 2.2 μ V(IHF)
Stereo Separation : 33dB at 1kHz
Total Harmonic
Distortion : 0.5%

Signal to Noise

Ratio : 60dB

Image Rejection : 55dB (at 98MHz)

AM Tuner Section

Tuning Range : 535 — 1,605kHz
Sensitivity : 100 μ V
Image Rejection : 45dB (at 1400kHz)
Selectivity : 32dB
IF Rejection : 38dB

Audio Section

IHF Dynamic Power : 30W (15W+15W) at 8 Ω

Continuous Power : 24W (12W+12W) at 8 Ω

Total Harmonic

Distortion : 1.0% (at rated power)

Power Band Width : 30 — 20kHz

Frequency Response : 20 — 30kHz

Input Sensitivity (at rated power)

Phono : 3.0mV

Aux : 100mV

Playback : 100mV

Recording Out Level : 150mV

Power Supply : AC 120V, 60Hz

Power Consumption : 90 Watts

DISASSEMBLY INSTRUCTIONS

■ TO REMOVE TOP COVER

Remove four screws from both sides of top cover, and remove cover in the direction of top (see Fig. 1).

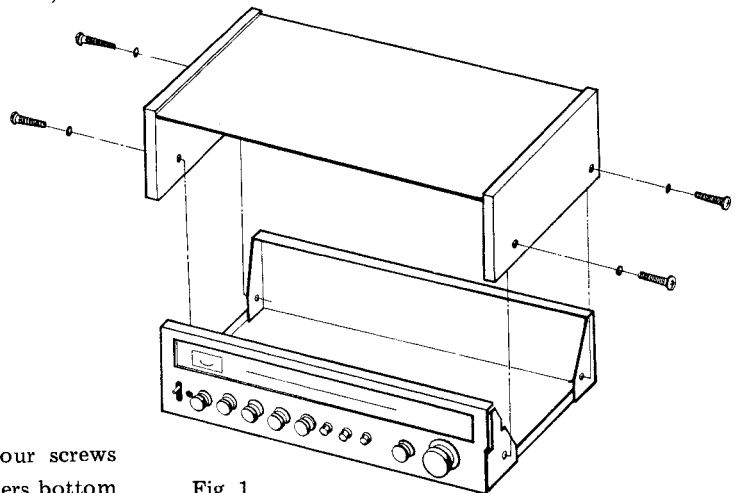


Fig. 1

■ TO REMOVE BOTTOM BOARD

Remove nine screws from bottom board. (Four screws fixes feet and bottom board to chassis, and others bottom board to chassis.)

Remove bottom board from chassis (see Fig. 2).

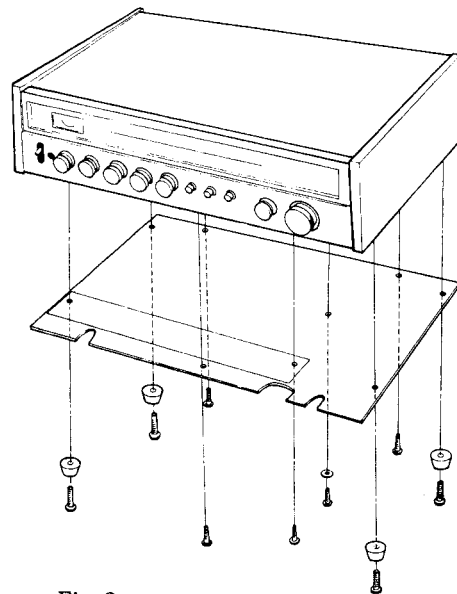


Fig. 2

■ TO REMOVE FRONT PANEL

1. Remove top cover.
2. Remove following knobs.
(Speaker select, Bass, Treble, Balance, Volume, Source and Tuning)
3. Remove five screws as shown in Fig. 3, and remove front panel from chassis, with care to avoid damage.

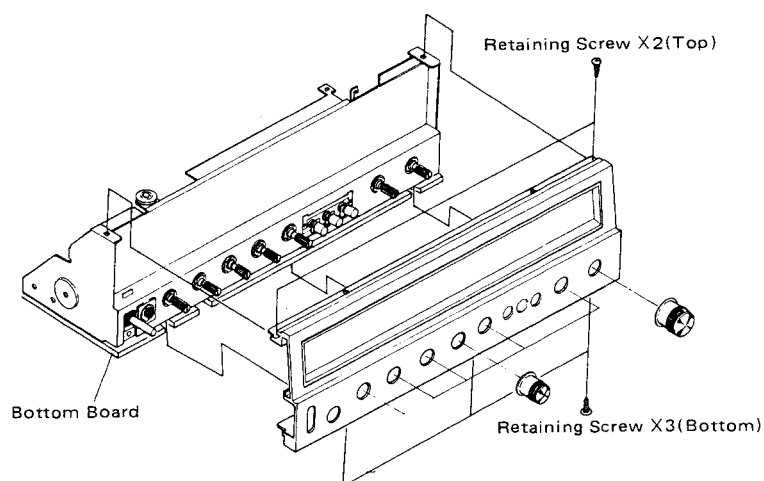


Fig. 3

HOW TO REPLACE MAIN PARTS OF FRONT SECTION

1. Remove front panel as inscribed before. So power, speaker and source switches, and headphone jack can be simply replaced as illustrated in Fig. 4.

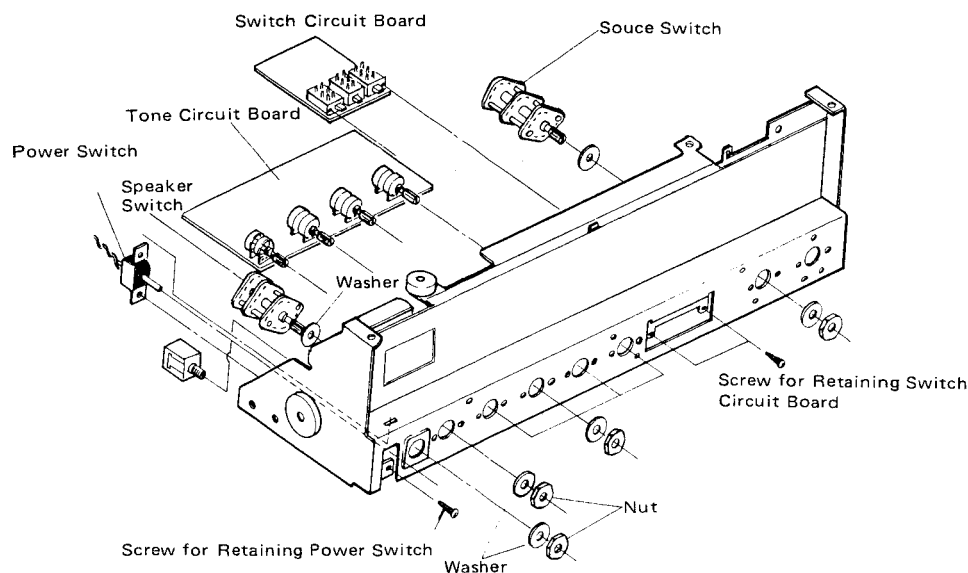


Fig. 4

2. To replace other controls, release signal cords to tone circuit board or switch circuit board from clamps and remove circuit boards from front bracket. Then replace required parts. (see Fig. 4)
3. To replace Dial Scale, refer to Fig. 5.
4. To replace Source and Speaker indicator lamps, remove a retaining screw, and remove Lamp board from its holders. Replace Lamps.

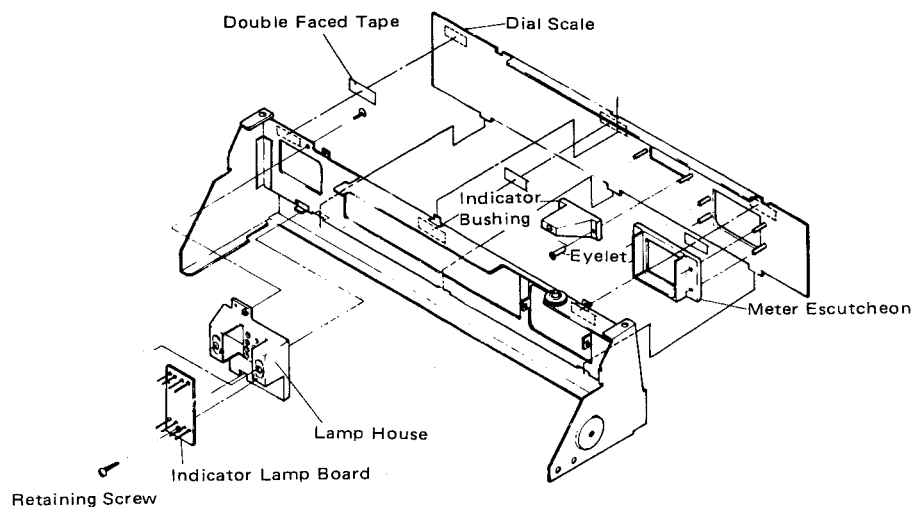


Fig. 5

MAIN PARTS ARRANGEMENT

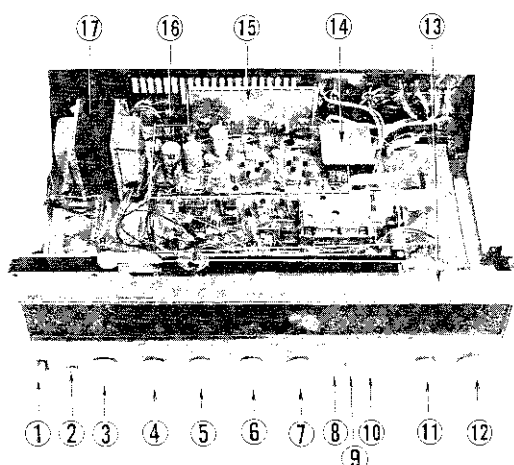


Fig. 6-A

DWG. NO.	PART NO.	PART NAME	DWG. NO.	PART NO.	PART NAME
1	QSU-1120-005	Power Switch	10	E47959-001	Tape Mon. Knob
2	Q03958-001	Headphone Jack	11	E48542-002	Source Select Knob
3	E48542-002	Speaker Select Knob	12	E48541-002	Tuning Knob
4	"	Bass Control Knob	13	E1735-003	Front Panel Ass'y
5	"	Treble Control Knob	14	E48713-001	Shield Plate
6	"	Balance Control Knob	15	E33512-001	Heat Sink
7	"	Volume Control Knob	16	TAP-202	Power Amp. Circuit Ass'y
8	E47959-001	Loudness Switch Knob	17	E03075-26	Power Transformer
9	"	Mode Switch Knob			

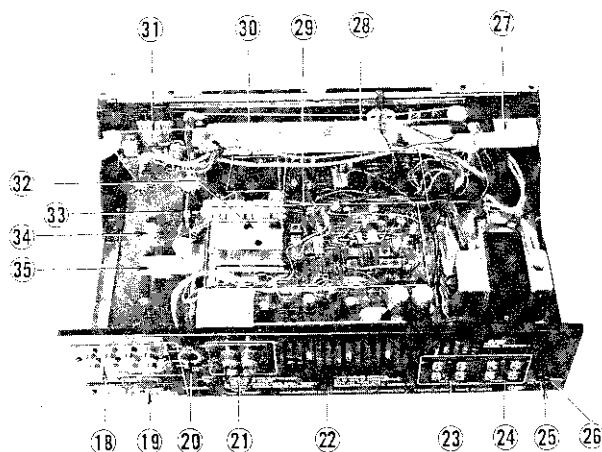


Fig. 6-B

DWG. NO.	PART NO.	PART NAME	DWG. NO.	PART NO.	PART NAME
18	E0778-80	PH, AUX & TAPE Jack	27	E21343-001	Reflector
29	Q30156-005	Antenna Terminal	28	TAC-299	Tone Circuit Ass'y
20	Q03967	DIN Socket	29	TFM-314GUA-1	Tuner Circuit Ass'y
21	E0778-40	Pre-Main Jack	30	TAC-299	Tone Circuit Ass'y
22	E1740-001	Rear Panel	31	E48719-001	Circuit Board
23	Q30156-001	Speaker Terminal-SYSTEM1	32	E03546-002	FM Front End Ass'y
24	"	Speaker Terminal-SYSTEM2	33	QZD-1205-003	Dial Drum Ass'y
25	Q03056-14	Power Cord with Plug	34	E03145-024	AM Core Antenna
26	E31704-001	Strain Relief	35	E43674-001	Antenna Holder

TUNER ALIGNMENT INSTRUCTIONS

■ PREPARATIONS

1. Connect 8Ω speakers to SYSTEM-1 speaker terminals.
2. Set controls as follows.

Speaker Select	SYSTEM-1	Loudness	OFF
Bass, Treble	Flat	Mode	STEREO
Balance	Center	Tape Monitor	OFF
Volume	MAX	Source	Required Position

3. Maintain regular line voltage (AC 120V).
4. Allow a few minutes to warm up receiver and equipments, and use only enough generator output to obtain suitable indications.

■ AM ALIGNMENT

1. Set Source Switch to AM position.
2. Test Equipment

- a) Signal Generator : Fashion loop of several turns of wire (or Loop Antenna) and connect generator across loop as illustrated in Fig. 7. Then set generator to 1700kHz from 455kHz with demodulated 400Hz at 30%.

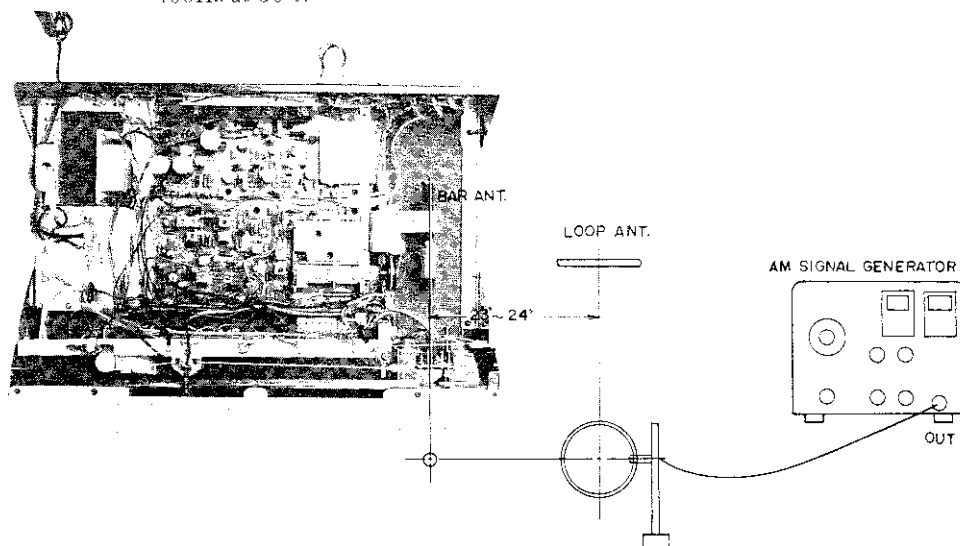


Fig. 7

- b) VTVM : Set to AC lowest range and connect across Speaker Terminals. Adjust generator output so that VTVM reading becomes 2V (500mW/8 ohms) approximately.

3. Alignment

STEP	GENERATOR FREQUENCY	DIAL SETTING	ADJUST	REMARKS
1	455kHz	Tuning gang : fully closed	T103,T104,T105	Adjust for maximum output and symmetric characteristics.
2	600kHz	Dial : 600kHz (27.0mm/ 1-1/16" from starting point)	L102	Lock tuning gang.
			L101	Adjust for maximum output.
3	1400kHz	Dial : 1400kHz (125.0mm/ 4-15/16" from starting point)	C129	Lock tuning gang.
			C127	Adjust for maximum output.
4	1000kHz	Dial : 900kHz (78.0mm/ 3-1/16" from starting point)		Check dial scale. Repeat seps 2 through 4.

* Refer to Fig. 10 for Adjustment Point.

■ FM IF ALIGNMENT

1. Remove built-in antenna from FM Ant Terminal, and set Source switch to FM position.
2. Test Equipment.

FM IF Genescope : Connect Genescope output to TEST POINT (6) of Front End with $2.2k\Omega$ resistor in series as shown in Fig. 8.

3. Alignment

STEP	GENESCOPE FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
1	10.7MHz	Point of non-interference	Connect IF Genescope Input to TEST POINT (A) through network as shown in Fig. 8-A and Fig. 10.	T101	Adjust for maximum gain and symmetry of response similar to Fig. 9-A with markers as shown.
2	10.7MHz	Point of non-interference	Connect IF Genescope Input to TEST POINT (B) with Capacitor of $0.04\mu F$ in series as shown in Fig. 8-B and Fig. 10.	T102	Adjust the secondary of T102 to place marker at center of crossover line similar to Fig. 9-B. Adjust the primary of T102 for maximum amplitude and straightness.

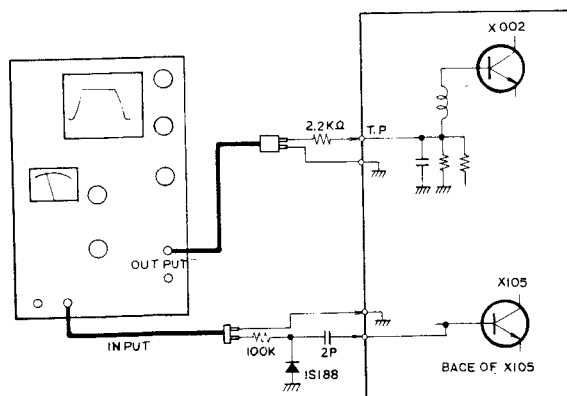


Fig. 8-A

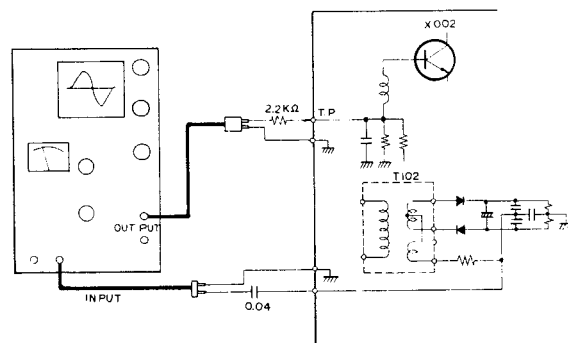


Fig. 8-B

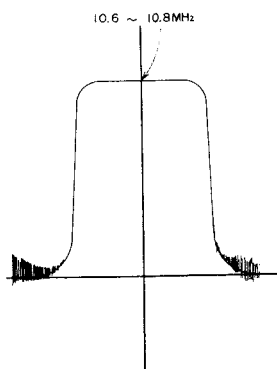


Fig. 9-A

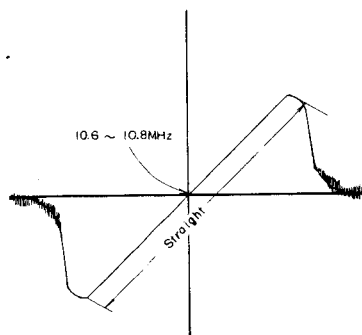


Fig. 9-B

■ FM RF ALIGNMENT

1. Follow as inscribed before.

2. Test Equipment

FM Signal Generator : Connect Generator Output through 300 ohms balanced dummy antenna to FM Antenna terminals.

VTVM : Set to AC lowest range and connect to speaker terminals.

3. Alignment

STEP	GENERATOR FREQUENCY	DIAL SETTING	INDICATOR	ADJUST	REMARKS
1	108MHz (400Hz,30% Mod.)	108MHz (Distance from start point : 138.2mm/ 5-15/16")	VTVM across Speaker Terminals.	C023	Rock tuning gang.
				C021,C022	Adjust for maximum output.
2	88MHz (400Hz,30% Mod.)	88MHz (Distance from start point:5.9mm/ 3/16")			Check dial scale.
3	98MHz (400Hz,30% Mod.)	98MHz (Distance from start point : 69.0mm/ 2-23/32")			Check dial scale. Repeat steps 1 through 3.

■ FM MULTIPLEX ALIGNMENT

1. Set source switch to FM position and make sure Mode switch is set to STEREO.

2. Preparation of Test Equipments

(A) Adjust output carrier level of FM Signal Generator to be 60dB. (Carrier frequency should be 98MHz.)

(B) Set modulation of Generator carrier to 7.5kHz deviation by only PILOT signal of FM stereo modulator.

(C) Set modulation of Generator carrier that is sum of PILOT and MAIN signal to 7.5kHz deviation by adjusting output level of stereo modulator. (Modulation frequency should be 400Hz.)

3. Alignment

Step	Items	Input		Indicator	Adjust	Alignment Remarks
		Connection	Signal			
1	19kHz and 38kHz stage	Generator output to FM Antenna terminal.	19kHz	VTVM to	L103 L104	Adjust for maximum deflection.
2	Separation	"	L or R	FM-L or R out	R153	Adjust for minimum deflection.
3	Repeat steps 1 and 2 until completing adjustment.					

TUNER ALIGNMENT POINT

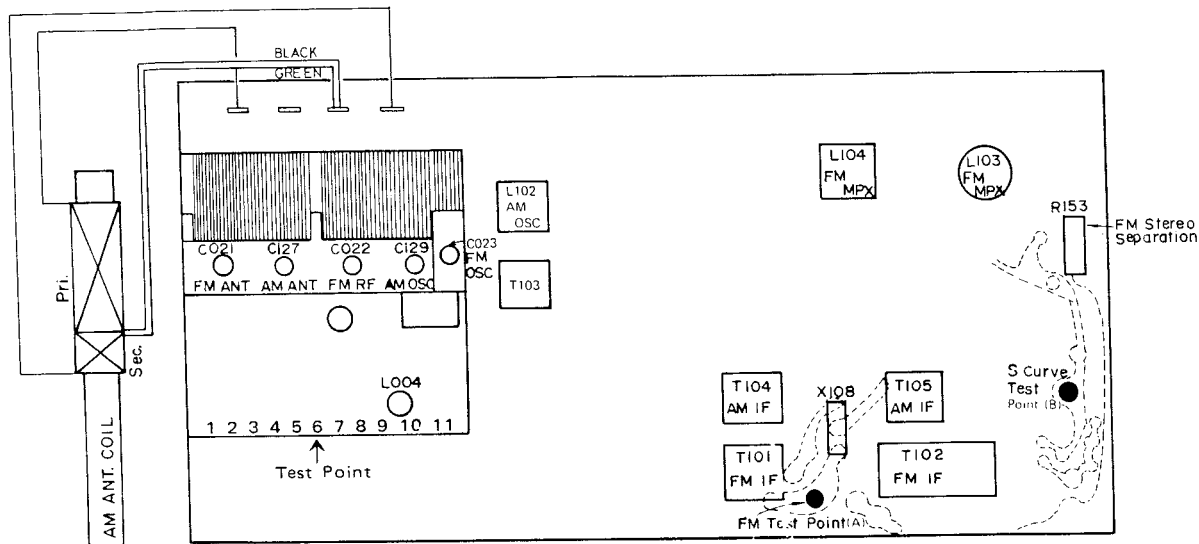


Fig. 10

DIAL STRINGING GUIDE

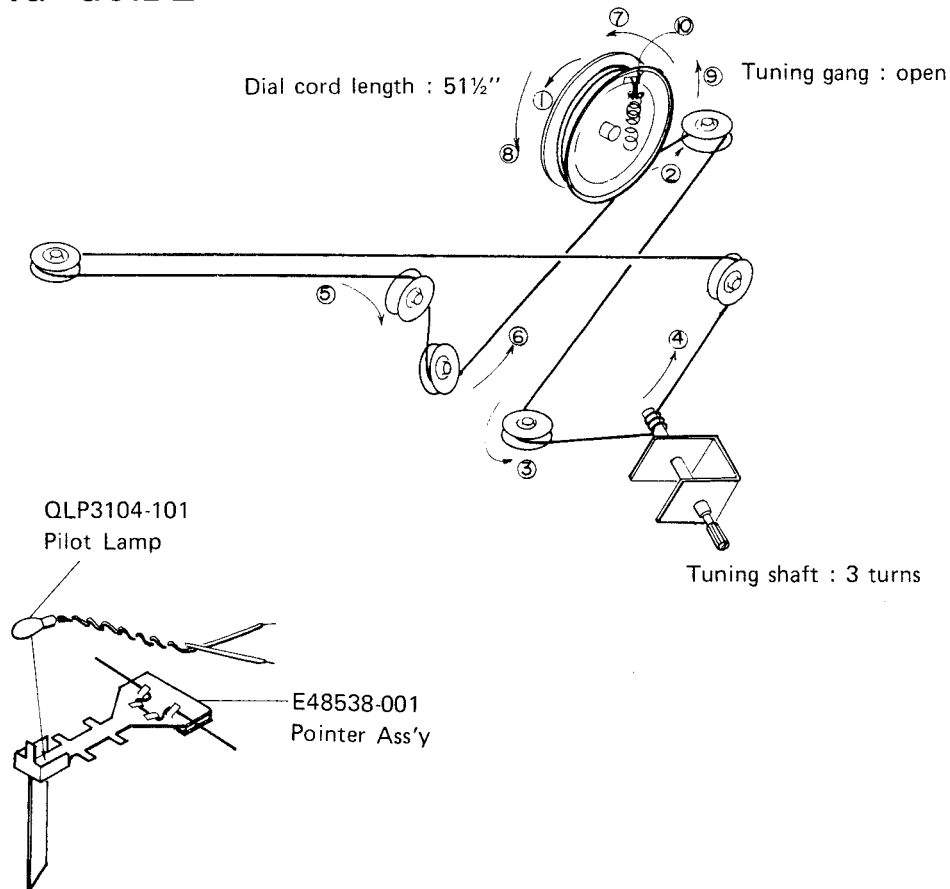


Fig. 11

PARTS ARRANGEMENT ON CIRCUIT BOARD

■ TAC-299 TONE CIRCUIT

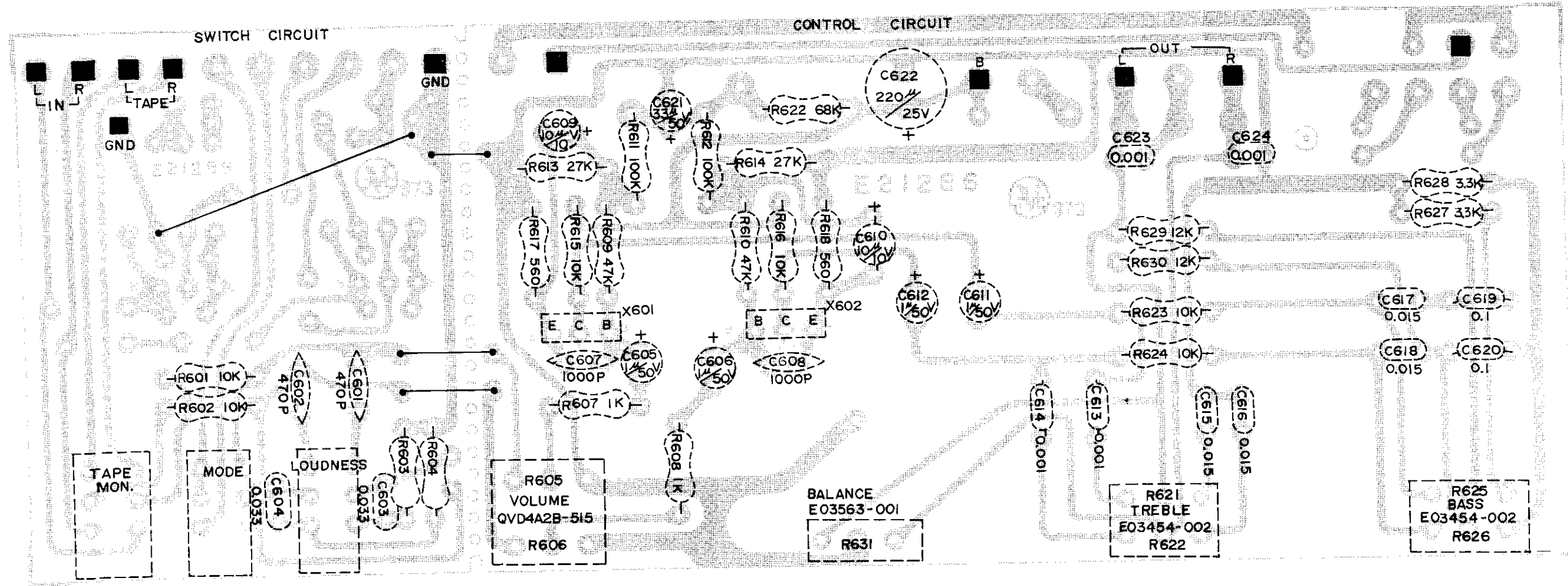


Fig. 12 Bottom View

[NOTE] When requesting the resistor or capacitor marked with *, write the required resistance or capacitance value in addition to the right-hand side of hyphen.

Part No.	Part Name	Symbol No.	Description
Transistors 2SC458LGC	Silicon	X601,602	Hitachi
Resistors QVD4A2B-515 E03454-002 E03563-001 *Q04800-	Variable Variable Variable Carbon	R605,606 R621,622,625,626 R631 R617,618 R607,608 R627,628 R601,602,603,604 R615,616,623,624 R629,630 R613,614	100k Ω (B) 100k Ω (A) 100k Ω (W) 1/4W, $\pm$ 10% 560 Ω 1K 3.3K 10K 10K 12K 27K

Part No.	Part Name	Symbol No.	Description
*Q04800-	Composition	R609,610 R622 R611,612	1/4W, $\pm$ 10% 47K 68K 100K
Capacitors Q03106-10 Q03108-200 Q03112-1 Q03112-30 Q04051-470 Q46962-1000 *Q03244-	Electrolytic Electrolytic Electrolytic Electrolytic Ceramic Ceramic Mylar	C609,610 C622 C605,606,611,612 C621 C601,602 C607,608 C613,614,623,624 C615,616,617,618 C603,604 C619,620	10 μ F, 10V 220 μ F, 25V 1 μ F, 50V 10 μ F, 50V 470PF, DC 50V, $\pm$ 5% 1000PF, DC 50V DC 50V, $\pm$ 10% 0.001 μ F 0.015 μ F 0.033 μ F 0.1 μ F

■ TFM-314GUA-1 TUNER CIRCUIT

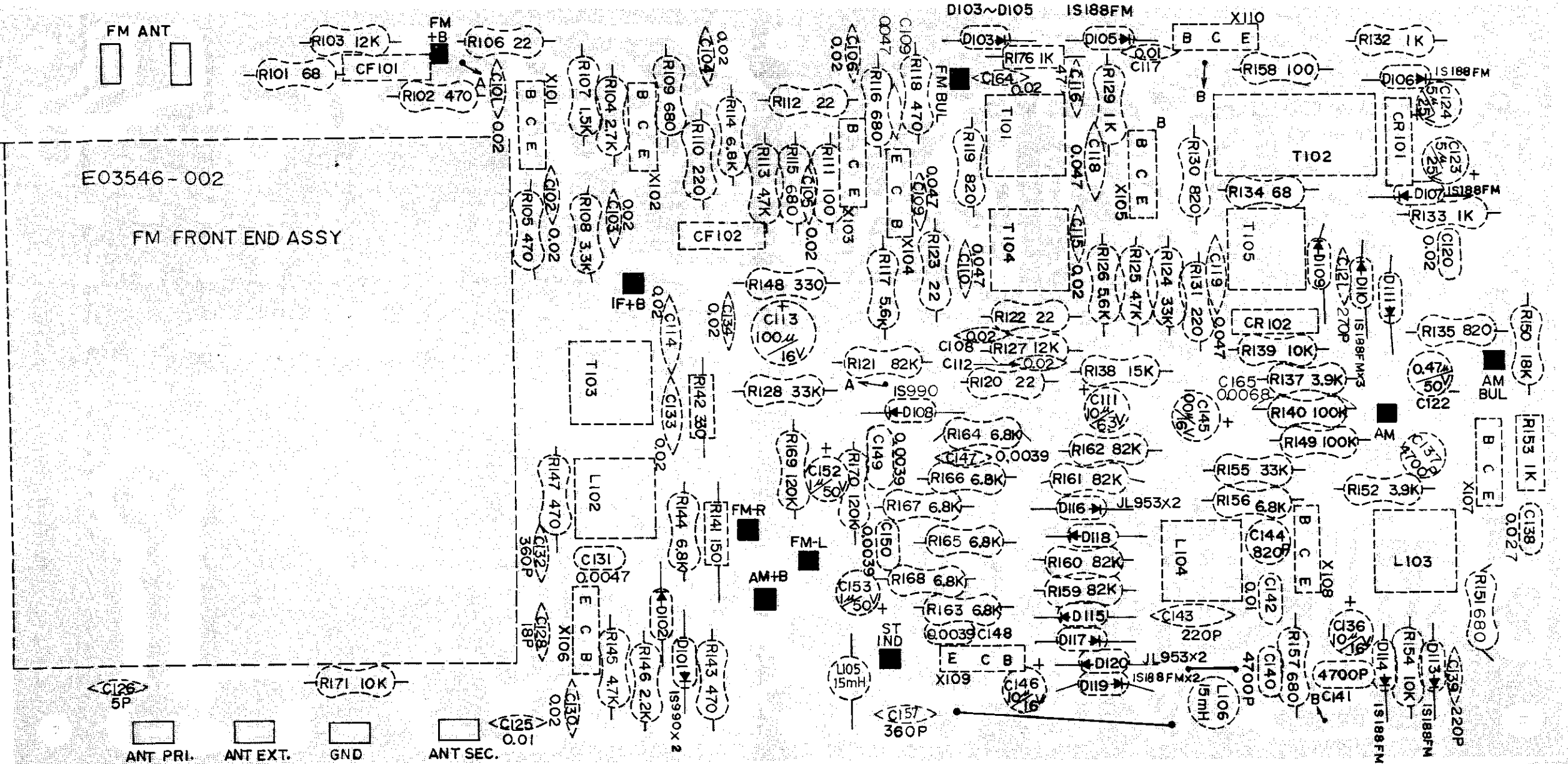


Fig. 13 Bottom View

Part No.	Part Name	Symbol No.	Description
Front End E03546-002	FM Front End Ass'y		
Transistors			
2SC710B	Silicon	X101~105	FM IF AMP. Mitsubishi
2SC929E	Silicon	X106	AM Conv. Sanyo
2SC711E	Silicon	X107,108	FM MPX Mitsubishi
2SC711F	Silicon	X109,110	FM MPX Mitsubishi
Diodes			
1S188FM	Germanium	D103,105~107,109~111, 113,114,119,120,125	Sanyo
JL-953	Silicon	D115~118	FM MPX Texas Instrument
1S990	Varistor	D101,102,108	AM Conv. JRC

Part No.	Part Name	Symbol No.	Description
Coils & Transformers			
E03079-13	Oscillator Coil	L102	AM Osc.
E03117-003	Multiplex Coil	L103	
E03117-010	Multiplex Coil	L104	
E0747-1	Ferri Inductor	L105,106	
E03062-4	IF Transformer	T103	AM IF 1st
E03062-22	IF Transformer	T104	AM IF 2nd
E03062-23	IF Transformer	T105	AM Detector
E03078-27	IF Transformer	T101	FM IF 4th
E03078-26	IF Transformer	T102	FM IF Detector

Part No.	Part Name	Symbol No.	Description
Resistors			
Q04843-4	Variable	R153	Separation Adjust
04091-150	Composition	R141	150Ω, ¼W, ±20%
04091-330	Composition	R142	330Ω, ¼W, ±20%
*Q04800-	Carbon		¼W, ±10%
		R106,112,120,122,123	22Ω
		R101,134	68Ω
		R111,158	100Ω
		R177	150Ω
		R110,131	220Ω
		R148	330Ω
		R102,105,118,143,147	470Ω
		R107,109,115,116,151,157	680Ω
		R119,130,135	680Ω
		R129,132,133,176	820Ω
		R107	1K
		R146	1.5K
		R104	2.2K
		R108	2.7K
		R137,152	3.3K
		R113,125,145	3.9K
		R117,126	4.7K
		R114,144,156,163,164,165,166,167,168	5.6K
		R139,171,154	6.8K
		R103,127	6.8K
		R138	10K
		R150	12K
		R124,128,155	15K
		R121,159~162	18K
		R140,149	33K
		R169,170	82K
			100K
			120K
Capacitors			
Q03104-10	Electrolytic	C111	10μF, 6.3V
Q03108-10	Electrolytic	C136,146	10μF, 16V
Q03108-100	Electrolytic	C145	100μF, 16V
Q03108-100	Electrolytic	C113	100μF, 16V
Q03110-4.7	Electrolytic	C123,124	4.7μF, 25V
Q03112-0.5	Electrolytic	C122	0.5μF, 50V
Q03112-1	Electrolytic	C152,153	1μF, 50V
Q04051-8	Ceramic	C126	5PF, 50V, ±5%
Q04051-18	Ceramic	C128	18PF, 50V, ±5%
Q04051-47	Ceramic	C116	47PF, 50V, ±5%
Q04051-220	Ceramic	C139,143	220PF, 50V, ±5%
Q04051-270	Ceramic	C121,139,143	270PF, 50V, ±5%
Q04051-360	Ceramic	C157	360PF, 50V, ±5%
Q46962-01	Ceramic	C107,109,117,125	0.01μF, 50V
Q46962-022	Ceramic	C101,102,103,104,105,106,108,112,114,115,120,130,133,134,164	0.022μF, 50V
		C107,110,118,119	0.022μF, 50V
E03375-047	Ceramic	C144	0.047μF, 50V
Q03269-821	Polystyrol	C137	820P, 125V, ±5%
Q03269-472	Polystyrol		4700P, 125V, ±5%
*Q03244-	Mylar		50V, ±10%
		C147,148,149,150	0.0039μF
		C131,140,141	0.0047μF
		C165	0.0068μF
		C142	0.01μF
		C138	0.027μF
Others			
E0752-9	CR Block	CR102	FM Detector
E0752-10	CR Block	CR101	AM Detector
E03357-001	Ceramic Filter	FC101,102	

■ TAP-202 POWER & RECTIFIER CIRCUIT

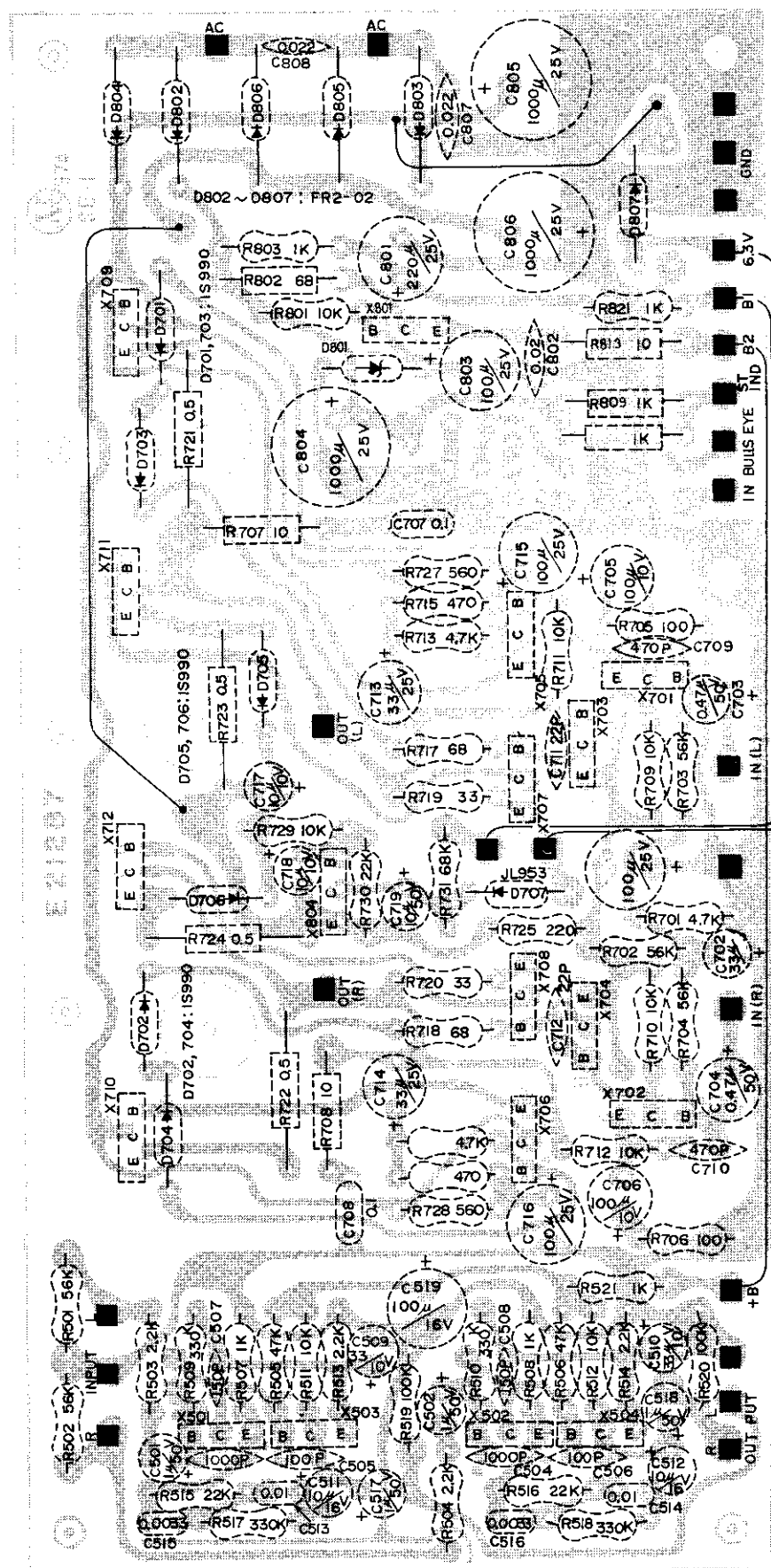


Fig. 14 Bottom View

Part No.	Part Name	Symbol No.	Description
Transistors			
2SC458LGC	Silicon	X501,502,503,504	Hitachi
2SA672B	Silicon	X701,702	
2SC1213AC	Silicon	X703,704,705,706	PT-032 Kit, Hitachi
2SA673AC	Silicon	X707,708	
2SC1061C	Silicon	X709,710,711,712	
2SC1213AB	Silicon	X801	Hitachi
2SC458ALGC	Silicon	X804	Hitachi
Diodes			
FR2-02	Silicon	D802~806	Fuji
1S990	Varistor	D701~706	JRC
JL-953	Varistor	D707,807	Texas Instrument
E0771-12	Zener	D801	JRC, WZ-130
Resistors			
E03347-002	Metal Film	R721~724	0.5Ω, 1W, ±10%
04091-10	Composition	R707,708,813	10Ω, ½W, ±10%
04091-68	Composition	R802	68Ω, ½W, ±10%
04091-1K	Composition	R809	1K, ¼W, ±20%
QRD126J-8R2	Carbon	R807	8.2Ω, ¼W, ±5%
*Q04800-	Carbon Resistor		¼W, ±10%
		R719,720	33Ω
		R717,718	68Ω
		R705,706	100Ω
		R725	220Ω
		R714,715	470Ω
		R727,728	560Ω
		R507,508,521,803,821	1K
		R503,504,513,514	2.2K
		R701,713,716	4.7K
		R511,512,709,710,711,729,	10K
		801	10k
		R515,516,730	22K
		R505,506	47K
		R501,502,702,703,704	56K
		R731	68K
		R519,520	100K
		R509,510,517,518	330K
Capacitors			
Q03106-10	Electrolytic	C717,718	10μF, 10V
Q03106-30	Electrolytic	C509,510,702	33μF, 10V
Q03106-100	Electrolytic	C705,706	100μF, 10V
Q03108-10	Electrolytic	C511,512	10μF, 16V
Q03108-100	Electrolytic	C519	100μF, 16V
Q03110-30	Electrolytic	C713,714	33μF, 25V
Q03110-100	Electrolytic	C803,701,715,716	100μF, 25V
Q03110-200	Electrolytic	C801	220μF, 25V
Q03110-1000	Electrolytic	C804,805,806	1000μF, 25V
Q03112-0.5	Electrolytic	C703,704	0.5μF, 50V
Q03112-1	Electrolytic	C501,502,517,518	1μF, 50V
Q03112-10	Electrolytic	C719	10μF, 50V
Q04051-22	Ceramic	C711,712	22PF, 50V, ±5%
Q04051-100	Ceramic	C505,506	100PF, 50V, ±5%
Q04051-150	Ceramic	C507,508	150PF, 50V, ±5%
Q04051-470	Ceramic	C709,710	470PF, 50V, ±5%
Q46962-1000	Ceramic	C503,504	1000PF, 50V
Q46962-022	Ceramic	C802,807,808	0.022μF, 50V
Q03244-332	Mylar	C515,516	0.0033μF, 50V
Q03244-103	Mylar	C513,514	0.01μF, 50V
Q03244-104	Mylar	C707,708	0.1μF, 50V

CONNECTIONS

SPEAKER SELECTOR

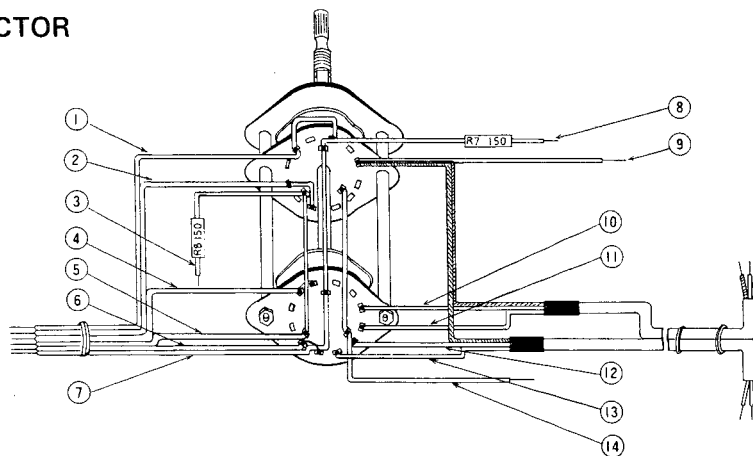


Fig. 15

DWG. NO.	WIRE'S COLOUR	CONNECTION	DWG. NO.	WIRE'S COLOUR	CONNECTION
1	WHT	SPK SYSTEM-1 (L)	8	—	PHONES (L)
2	RED	SPK SYSTEM-1 (R)	9	BLK	TAC-299, GND
3	---	PHONES (R)	10	RED (GRN)	SPK INDICATOR
4	YEL	SPK SYSTEM-2 (L)	11	WHT (GRN)	SPK INDICATOR
5	RED	TAP-202, OUT (R)	12	RED (BLU)	SPK INDICATOR
6	ORG	SPK SYSTEM-2 (R)	13	WHT (BLU)	SPK INDICATOR
7	WHT	TAP-202, OUT (L)	14	BLU	TFM-314GUA, BULLS EYE

■ FUNCTION SELECTOR

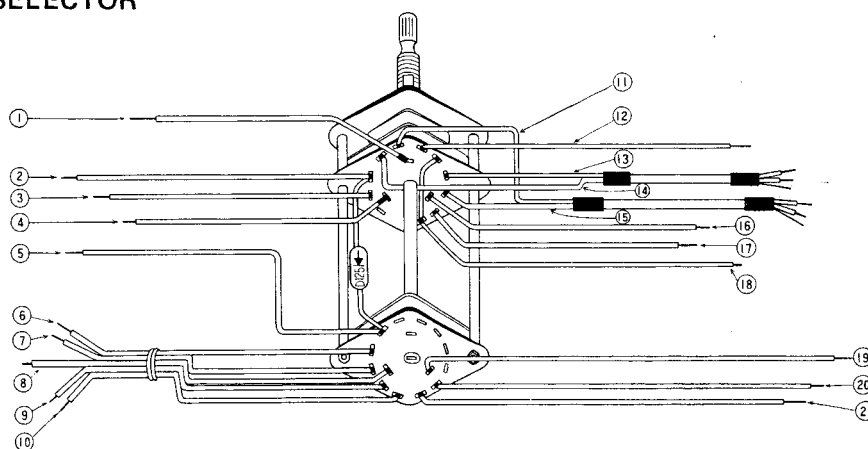


Fig. 16

DWG. NO.	WIRE'S COLOUR	CONNECTION	DWG. NO.	WIRE'S COLOUR	CONNECTION
1	BRW	TAC-299 IN	12	WHT	TFM-314GUA, FM OUT (L)
2	YEL	TFM-314GUA, AM BUL	13	RED(BLU)	AUX (R)
3	VIO	TFM-314GUA, FM BUL	14	WHT(BLU)	AUX (L)
4	WHT	Tuning Meter +	15	RED(GRY)	TAP-202, PHONO-OUT (R)
5	BLK	TFM-314GUA, R135	16	GRY	TAC-299, IN (R)
6	BRW	AM FUNCTION INDICATOR	17	RED	TFM-314GUA, FM OUT (R)
7	RED	FM FUNCTION INDICATOR	18	BLU	TFM-314GUA, AM OUT
8	GRY	TAP-202, GND	19	YEL	TFM-314GUA, IF +B
9	ORG	PHONO FUNCTION INDICATOR	20	ORG	TFM-314GUA, FM +B
10	YEL	AUX FUNCTION INDICATOR	21	YEL	TFM-314GUA, AM +B
11	WHT(GRY)	TAP-202, PHONO-OUT (L)			

EXPLODED VIEW (1)

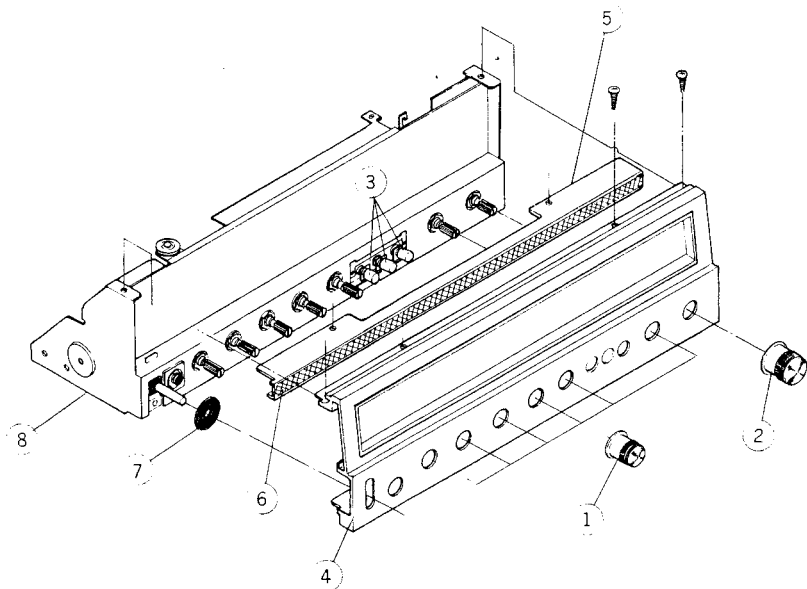


Fig. 17

DWG. NO.	PART NO.	PART NAME	DWG. NO.	PART NO.	PART NAME
1	E48542-002	Knob	5	E21290-001	Window Lock Bracket
2	E48541-002	Tuning Knob	6	E43682-013	Felt
3	E47959-001	Push Switch Knob	7	E45979-006	Spacer
4	E1735-003	Front Panel Ass'y	8	E1736-002	Front Bracket

EXPLODED VIEW (2)

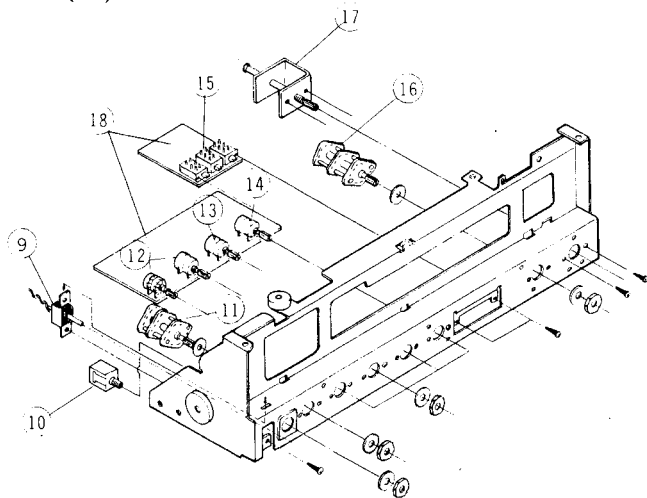


Fig. 18

DWG. NO.	PART NO.	PART NAME	DWG. NO.	PART NO.	PART NAME
9	QSU1120-005	Power Switch	14	QVD4A2B-515	Var. Resistor (Volume)
10	Q03958-001	Headphone Jack	15	QSP0230-003	Push Switch
11	Q03718-13	Rotary Switch (SPK)	16	E03447-002	Rotary Switch (Source)
12	E03454-002	Var. Resistor (Bass, Treble)	17	E46702-004	Tuning Shaft Ass'y
13	E03563-001	Var. Resistor (Balance)	18	TAC-299	Control Circuit Ass'y

EXPLODED VIEW (3)

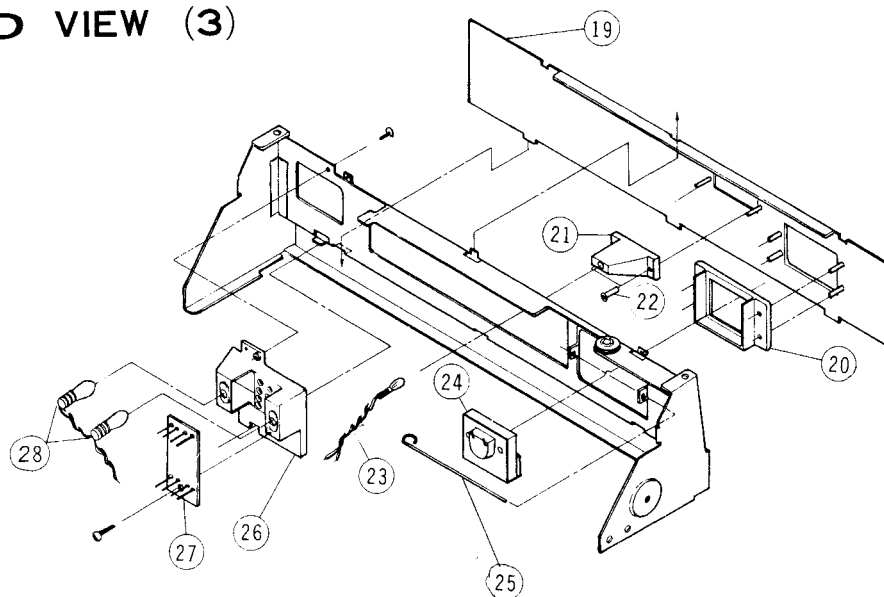


Fig. 19

DWG. NO.	PART NO.	PART NAME	DWG. NO.	PART NO.	PART NAME
19	E21369-002	Dial Scale Ass'y	24	E03176-011	Tuning Meter
20	E33419-001	Meter Escutcheon	25	E46090-002	Meter Holder
21	E48769-001	Indicator Bushing	26	E33495-002	Lamp House
22	EYB2003	Eyelet	27	E48719-001	Circuit Board
23	QLP3104-101	Pilot Lamp	28	Q04967-9J	Pilot Lamp

EXPLODED VIEW (4)

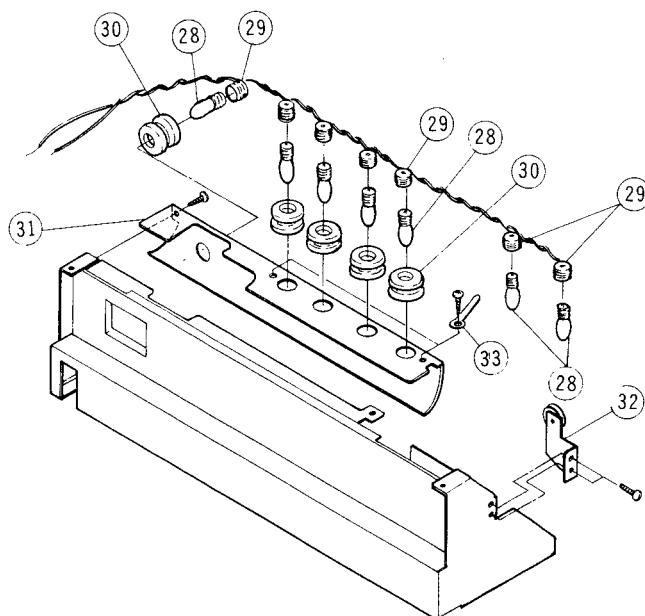


Fig. 20

DWG. NO.	PART NO.	PART NAME	DWG. NO.	PART NO.	PART NAME
29	50689-001	Lamp Socket	32	E46131-002	Roller Bracket Ass'y
30	E45292-002	Rubber Bushing	33	E50670-003	Wire Clamp
31	E21343-001	Reflector			

EXPLODED VIEW (5)

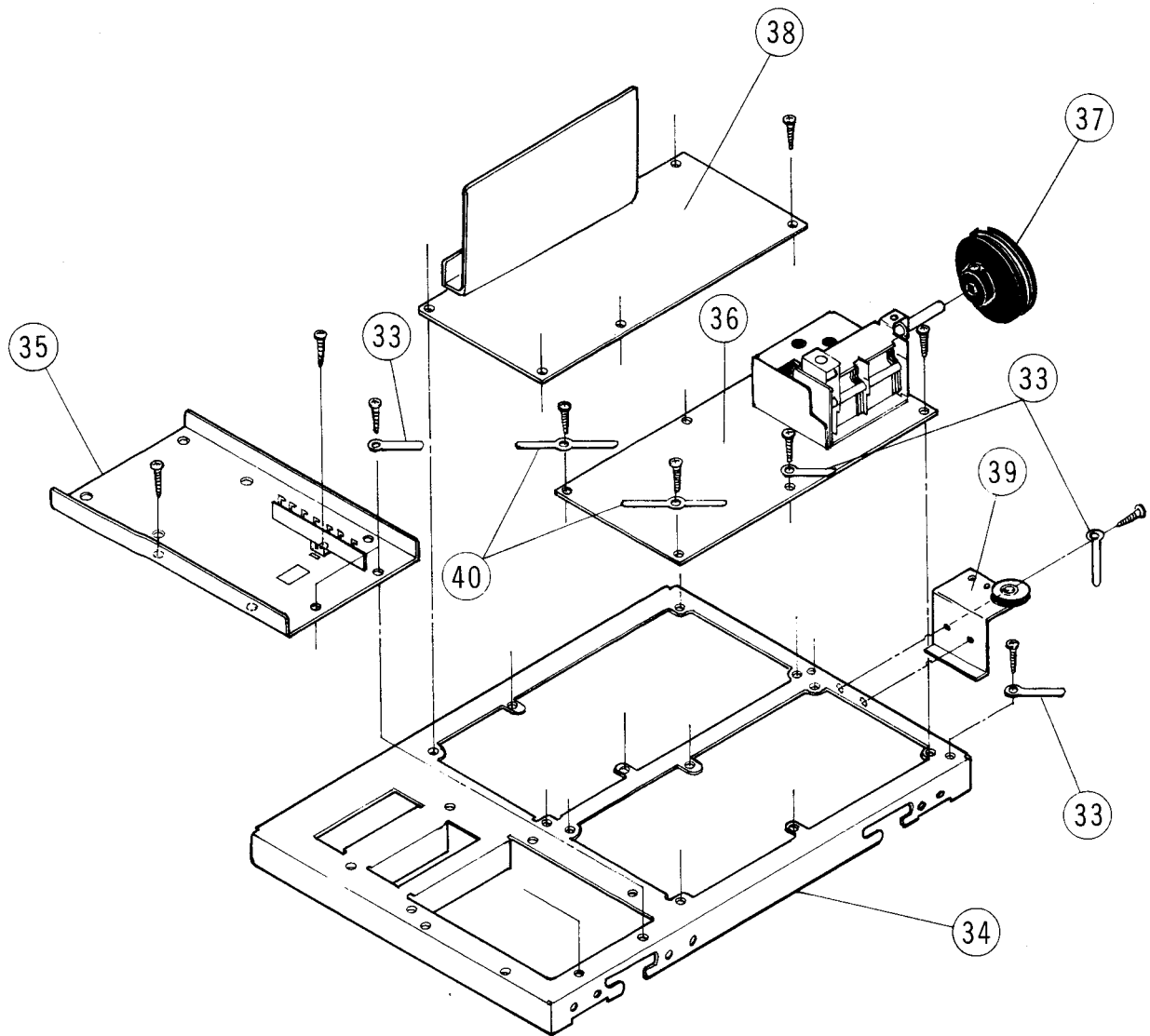


Fig. 21

DWG. NO.	PART NO.	PART NAME	DWG. NO.	PART NO.	PART NAME
34	E20318-007	Chassis Base	37	QZD1205-003	Dial Drum
35	E33497-002	Trans. Bracket	38	TAP-202	Power Circuit Ass'y
36	TFM-314GUA-1	Tuner Circuit Ass'y	39	E48714-001	Roller Bracket
			40	E47203-003	Wire Clamp

EXPLODED VIEW (6)

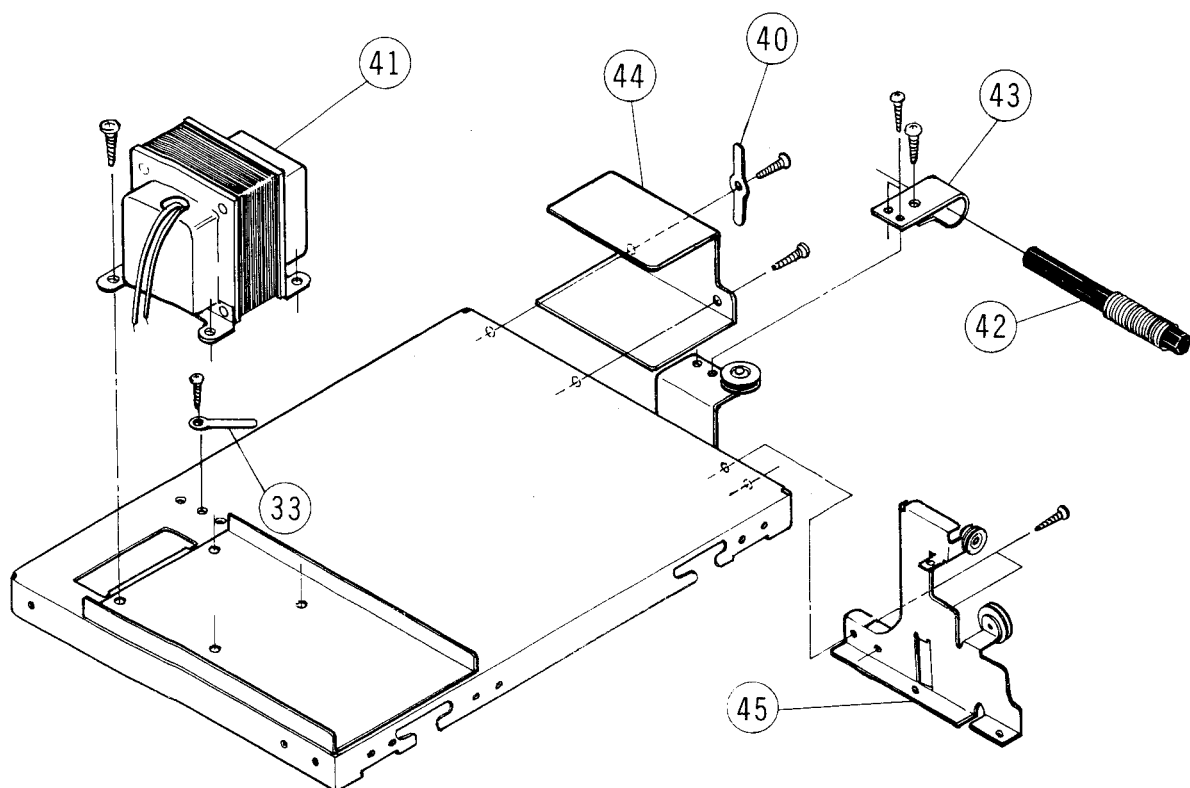


Fig. 22

DWG. NO.	PART NO.	PART NAME	DWG. NO.	PART NO.	PART NAME
41	E03075-26	Power Transformer	44	E48713-001	Shield Plate
42	E03145-024	AM Core Antenna	45	E33496-001	Support Bracket
43	E43674-001	Antenna Holder			

EXPLODED VIEW (7)

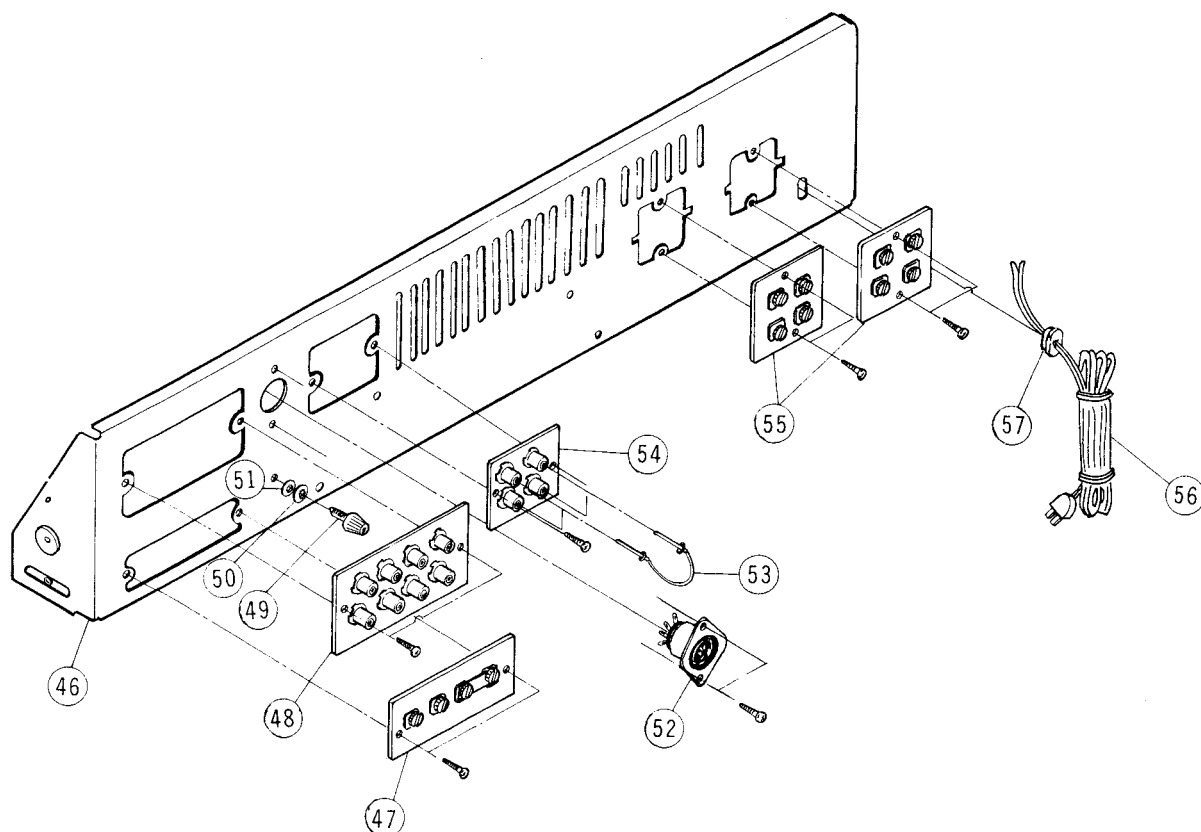


Fig. 23

DWG. NO.	PART NO.	PART NAME	DWG. NO.	PART NO.	PART NAME
46	E1740-001	Rear Panel	52	Q03967	DIN Socket
47	Q30156-005	Ant. Terminal	53	E48194-001	Shorting Plug
48	E0778-80	PH, AUX & TAPE Jack	54	E0778-40	Pin Jack Ass'y
49	E47268-001	Knob Screw	55	Q30156-001	Speaker Terminal
50	WBS3000N	Washer	56	Q03056-14	Power Cord
51	WNS3000N	Washer	57	E31704-001	Strain Relief

THE LIST OF MAIN PARTS FOR REPLACEMENT

Part No.	Part Name	Symbol No.	Description
Housing			
ED92381 E21341-001 E48074-003 QZF1514-001	Cabinet Ass'y Bottom Board Shield Paper Foot		Wooden Cover with Shield Paper on Bottom Board
Chassis Mechanism			
E1735-003 E21291-003 E1740-001 E21369-002 E47204-002 E46702-004 QZD1205-003 E45679-001 E48538-001 E33495-002 E21343-001 E47476-001 E45292-002 E33419-001 EYB2003 E48769-001	Front Panel Ass'y Front Escutcheon Rear Panel Dial Scale Rabbit Eye Tuning Shaft Ass'y Dial Drum Ass'y Spring Dial Pointer Lamp House Reflector Rubber Bushing Rubber Bushing Meter Escutcheon Eyelet Indicator Bushing	See "EXPLODED VIEW".	for Stereo Indicator Qty 2, Function & Speaker Indicator Qty 5, Fixed to Reflector for Tuning Meter " for Stereo Indicator
Knobs			
E48541-002 E48542-002 E47959-001	Tuning Knob Knob Push Switch Knob	See "EXPLODED VIEW".	Tuning Bass, Treble, Volume, Balance, Source, Speaker Speaker, Loudness, Tape, Mode
Switches			
E03447-002 Q03718-13 QSU1120-005 QSP0230-003	Rotary Switch " Lever Switch Push Switch	S1 S2 S3,4,5	Source Speaker ON-OFF, UL Approved Tape Monitor, Mode, Loudness
Connectors			
Q03958-001 E0778-80 E0778-40 Q30156-005 Q30156-001 Q03967 Q03056-14 50689-001 E48194-001	Jack Ass'y Pin Jack Ass'y Pin Jack Ass'y Terminal Board Terminal Board DIN Socket Power Cord w/Plug Lamp Socket Ass'y Short Plug Ass'y	See "EXPLODED VIEW".	Headphones Phono, Aux, Tape, Pre-out, Main-in Antenna (FM & AM) Speaker (SYSTEM-1, SYSTEM-2) Tape Rec./Play Back Source & Speaker Indicators, Dial Illumination, Tuning Meter Pre-Main Shorting
Transistors			
2SC710B 2SC929E 2SC711E 2SC711F 2SC458LGC 2SA672B 2SC1213AC	Silicon Transistor Silicon Transistor Silicon Transistor Silicon Transistor Silicon Transistor Silicon Transistor Silicon Transistor	X101~105 X106 X107,108 X109,110 X501~504,601,602 X701,702 X703~706	Mitsubishi Sanyo Mitsubishi Mitsubishi Hitachi PT-038, Kit Hitachi

Part No.	Part Name	Symbol No.	Description
2SA673AC 2SC1061C 2SC1213AB 2SC458ALGC	Silicon Transistor Silicon Transistor Silicon Transistor Silicon Transistor	X707,708 X709~712 X801 X804	} PT-038, Kit Hitachi Hitachi Hitachi
Diodes			
1S188FM	Germanium Diode	D103,105~107,109~ 111,113,114,119, 120,125	Sanyo
JL-953 FR2-02 1S990	Silicon Diode Silicon Diode Varistor	D115~118,707,807 D802~806 D101,102,108,701~ 706	Texas Instrument Fuji JRC
E0771-12	Zener Diode	D801	JRC, WZ-130
Coils & Transformers			
E03145-024 E03079-13 E03117-003 E03117-010 E0747-1 E03062-4 E03062-22 E03062-23 E03078-27 E03078-26 E03075-26	Core Antenna Coil Oscillator Coil Multiplex Coil Multiplex Coil Ferri Inductor IF Transformer IF Transformer IF Transformer IF Transformer IF Transformer Power Transformer	L102 L103 L104 L105,106 T103 T104 T105 T101 T102	for AM AM Oscillator AM IF 1st AM IF 2nd AM IF Detector FM IF 4th FM IF Detector
Resistors			
QVD4A2B-515 E03454-002 E03563-001 E03347-002 Q04843-4	Variable Resistor Variable Resistor Variable Resistor Metal Film Resistor Variable Resistor	R605,606 R621,622,625,626 R631 R721~724 R153	100k(B), Volume 100k(B), Bass, Treble 100k(W), Balance 0.5Ω, 1W, ±10% FM Separation Adjust
Capacitors			
Q03110-1000 Q03269-821 Q03269-472	Electrolytic Capacitor Polystyrol Capacitor Polystyrol Capacitor	C804,805,806 C144 C137	1000μF, 25V 820PF, DC 125V, ±5% 4700PF, DC 125V, ±5%
Miscellaneous			
E03176-011 E43674-001 E31704-001 QMF66U2-R75 E44476-001 Q04967-95 QLP3104-101 E48719-001	Tuning Meter Antenna Holder Strain Relief Fuse Pilot Lamp Pilot Lamp Pilot Lamp Circuit Board	See "EXPLODED VIEW"	for AM Antenna for Power Cord UL Approved, 0.75A 6V, 35mA, Qty 8 Source & Speaker Indicators 8V, 150mA, Source & Speaker Indicators, Dial, Tuning Meter Stereo Indicator for Source, Speaker Indicator Lamps
Accessories			
E30580-392A E30539-397A BT20001 BT10001B	Instruction Book Schematic Diagram Warranty Card Service Station List		

The List of **JVC** Service Manual

(Phonograph)

No.	Model	No.	Model	No.	Model	No.	Model	No.	Model
2231	CD4-1E	2241	4344U (R#-2)	2251	VR-5501	2261	VS-5307	2271	VN-700
2232	SRP-473E	2242	MS-4431, 4311U	2252	VN-5101	2262	VR-5511	2272	4MD-10X
2233	N-404FMY #3	2243	MF-4440	2253	VS-5308	2263	4DD-10	2273	VP-10, VB-10
2234	SEA-V7E	2244	MF-4451	2254	VS-5332	2264	5911	2274	VS-5313
2235	MSL-502ES	2245	QSL-F777E	2255	VS-5352	2265	VT-700	2275	VN-900
2236	VS-5391	2246	MF-4430	2256	VS-5342	2266	4ME-4801	2276	GB-1ED
2237	VS-5396	2247	4MM-4600	2257	VS-5322	2267	VS-5399	2277	MSL-602L
2238	5520/5520U	2248	VR-5501L	2258	VR-5541	2268	4VN-770	2278	MSL-302L
2239	VR-5521L	2249	VR-5521	2259	VR-5551	2269	VP-100	2279	4VN-550
2240	4ME-4800	2250	4VR-5445	2260(B)	4VR-5414	2270	VB-100	2280	VT-500

No.	Model	No.	Model	No.	Model	No.	Model	No.	Model
2281	4VN-990	2291	VR-5660	2301	4ME-4804				
2282	N-404FMY-4	2292	{N-303FYE-2, N-203FY-2	2302	4MM-4604				
2283	4MM-1000	2293	SK-4430	2303	SEA-10				
2284	4VN-880	2294	VL-8	2304	5944				
2285	CSL-135E	2295	MF-4451U	2305	VS-5323				
2286	VN-300	2296	4VC-5244	2306	VS-5333				
2287	MF-4430U	2297	5844	2307	SX-3				
2288	4MD-20X	2298	VC-9	2308	4VR-5404				
2289	4DD-5	2299	VS-5397	2309	VR-5505				
2290	VT-900	2300	4VR-1006	2310					

Requirement to Customers

To ensure prompt supply of service parts, list part name, number and model number when ordering.

JVC AMERICA, INC.

58-75 Queens Midtown Expressway

Maspeth, New York, 11378

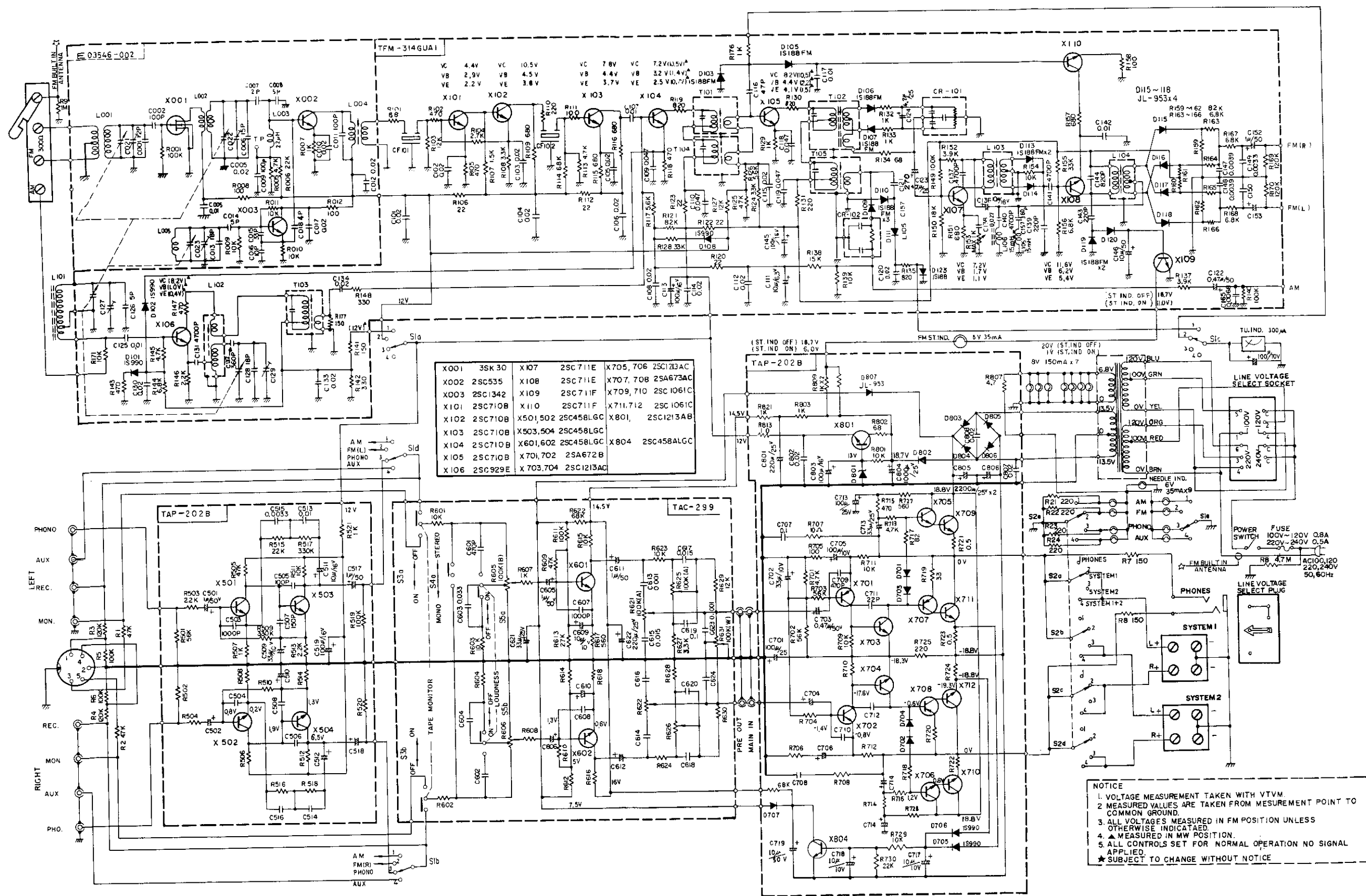
Manufactured by

VICTOR COMPANY OF JAPAN, LIMITED.

TOKYO, JAPAN



Printed in Japan
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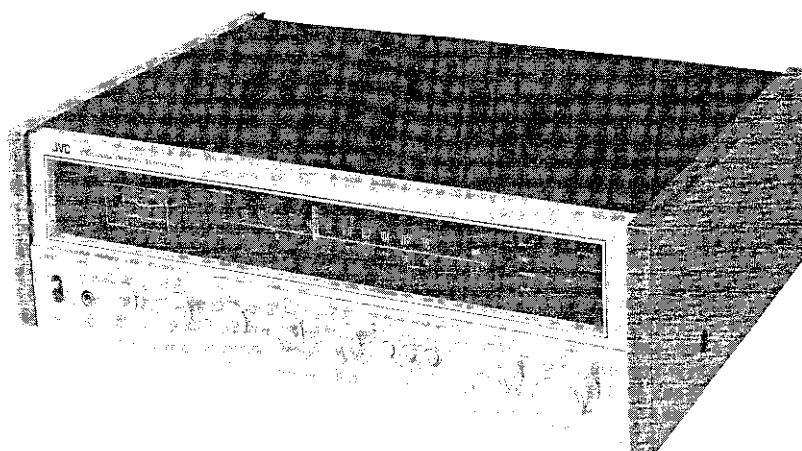


Schematic Diagram of Model VR-5505

JVC

No. 2309B

Supplementary SERVICE MANUAL



MODEL VR-5505 FM/AM STEREO RECEIVER

DIMENSIONS : H — 5 $\frac{3}{4}$ " , W — 18 $\frac{1}{4}$ " , D — 13"

WEIGHT : 17.6 lbs.

DESCRIPTION

The model which is sold in the areas other than U.S.A. is basically the same as American model except for the items noted here-in.

Before servicing and ordering the service parts, read this supplementary and original Service Manual No. 2309.

SPECIFICATIONS

Type : FM/AM stereo receiver
FET : 1
Transistor : 31
Diode : 33

FM Tuner Section

Tuning Range : 88 — 108MHz
Sensitivity : 2.2 μ V(IHF)
Stereo Separation : 33dB at 1kHz
Total Harmonic Distortion : 0.5%
Signal to Noise Ratio : 60dB

Image Rejection : 55dB (at 98MHz)

AM Tuner Section

Tuning Range : 535 — 1,605kHz
Sensitivity : 100 μ V
Image Rejection : 45dB (at 1400kHz)
Selectivity : 32dB
IF Rejection : 38dB

Audio Section

IHF Dynamic Power : 30W (15W+15W) at 8 Ω

Continuous Power : 24W (12W+12W) at 8 Ω

Total Harmonic

Distortion : 1.0% (at rated power)

Power Band Width : 30 — 20kHz

Frequency Response : 20 — 30kHz

Input Sensitivity (at rated power)

Phono : 3.0mV

Aux : 100mV

Playback : 100mV

Recording Out Level : 150mV

Power Supply : AC 100,120,220,240V(Selectable), 50/60Hz

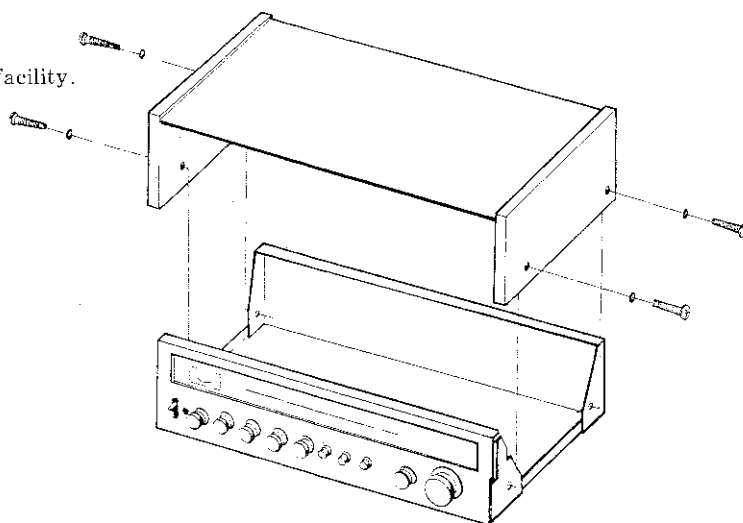
Power Consumption : 90 Watts

VICTOR COMPANY OF JAPAN, LIMITED

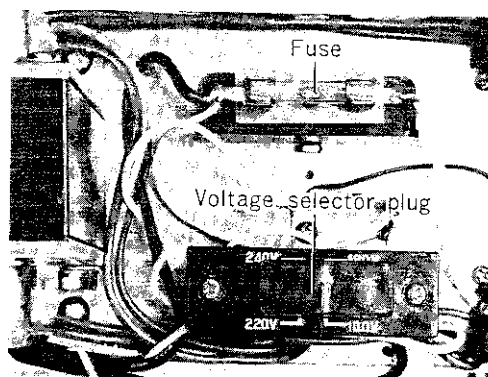
VOLTAGE CHANGEOVER

[NOTE] American model is not fitted with this facility.

- (1) Remove the four screws from the cabinet cover.
- (2) Remove the cabinet cover from the chassis.
- (3) The voltage select plug is located at the corner of the chassis. Remove this select plug and change the position of it so that the arrow points to the required voltage.
- (4) Replace the safety fuse as well as with one of appropriate capacity.



AC LINE VOLTAGE	FUSE
100 — 120V	0.8A
200 — 240V	0.5A



DIFFERENCE IN PARTS

Part Name	American model	Other area's model	Description
Power & Rectifier Circuit Ass'y (Electrolytic Capacitor)	TAP-202 (Q03110-1000)	TAP-202B (QEW41EA-228)	(C805,806,1000μF/25V→2200μF/25V)
Power Transformer	E03075-26	E03075-26B	
Voltage Select Socket	NO	E04084-001	
Voltage Select Plug	NO	E04085-001	
Stud	NO	E45786-003S	for Voltage Select Socket
Fuse Board Holder	NO	E47275-001	
Fuse Board Ass'y	NO	E43808-001	
Fuse	QMF66UZ-R75	04112-05 or 0.8	*-0.5:0.5 Amp. 200—240V *-0.8:0.8 Amp. 100—120V
Metalized Mylar Capacitor	QMF72EM-103	NO	Power Switch Across (0.01μF)
Composition Resistor	04091-2.7M	NO	Protecting from Electrolytic shock.
Instruction Book	E30580-392A	E30580-412A	
Schematic Diagram	E30539-397A	E30539-410A	
Warranty Card	BT10001	E32980-001 (PX only)	Accrssories
Service Station List	BT10001	BT10001B (PX only)	"
Spare Fuse	NO	04112-0.5 & 0.8	"