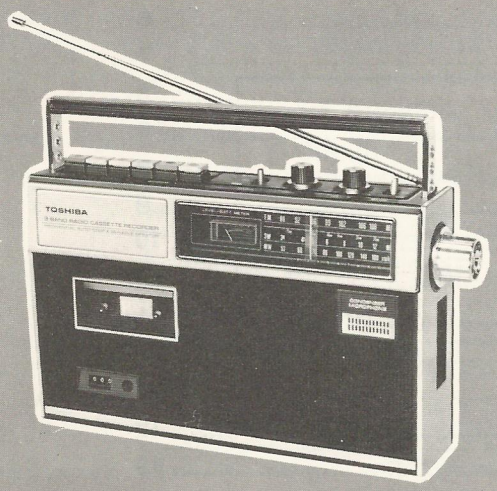
TOSHIBA

RADIO CASSETTE RECORDER

RT-313F



SPECIFICATIONS

Usable Tape:	C-30, C-60, C-90, C-120
Tape Speed:	4.8cm/sec.
Track:	2-Track, 1-Channel, Monophonic
Recording System:	AC Bias
Erasing System:	DC Erase
Power Source:	AC 240V 50Hz Dry Batteries (C Size x 4)
Power Consumption:	7 Watts (Max.)
Fast Forward and Rewind Time:	Within 120 Sec. (C-60)
Heads:	Record/Playback Head (Laminated Core) Erase Head
Radio Frequencies:	MW 525 – 1605 kHz
Range:	SW 4 – 12MHz FM 88 – 108MHz
Intermediate Frequencies:	SW, MW 455 kHz FM 10.7MHz
Antennas:	Ferrite Core Antenna for MW Telescopic Antenna for FM, SW
Jacks:	AC Jack Microphone 3.5ø (800 ohm) Remote Switch 2.5ø Line in 3.5ø (390K ohm) External SP 3.5ø
Speaker:	10cm Permanent Dynamic Speaker (8 ohm)
Output:	2W (Maximum)
Dimensions:	290mm(W) x 187mm(H) x 80mm(D)
Weight:	2.9kg (with Batteries)

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BLOCK DIAGRAM

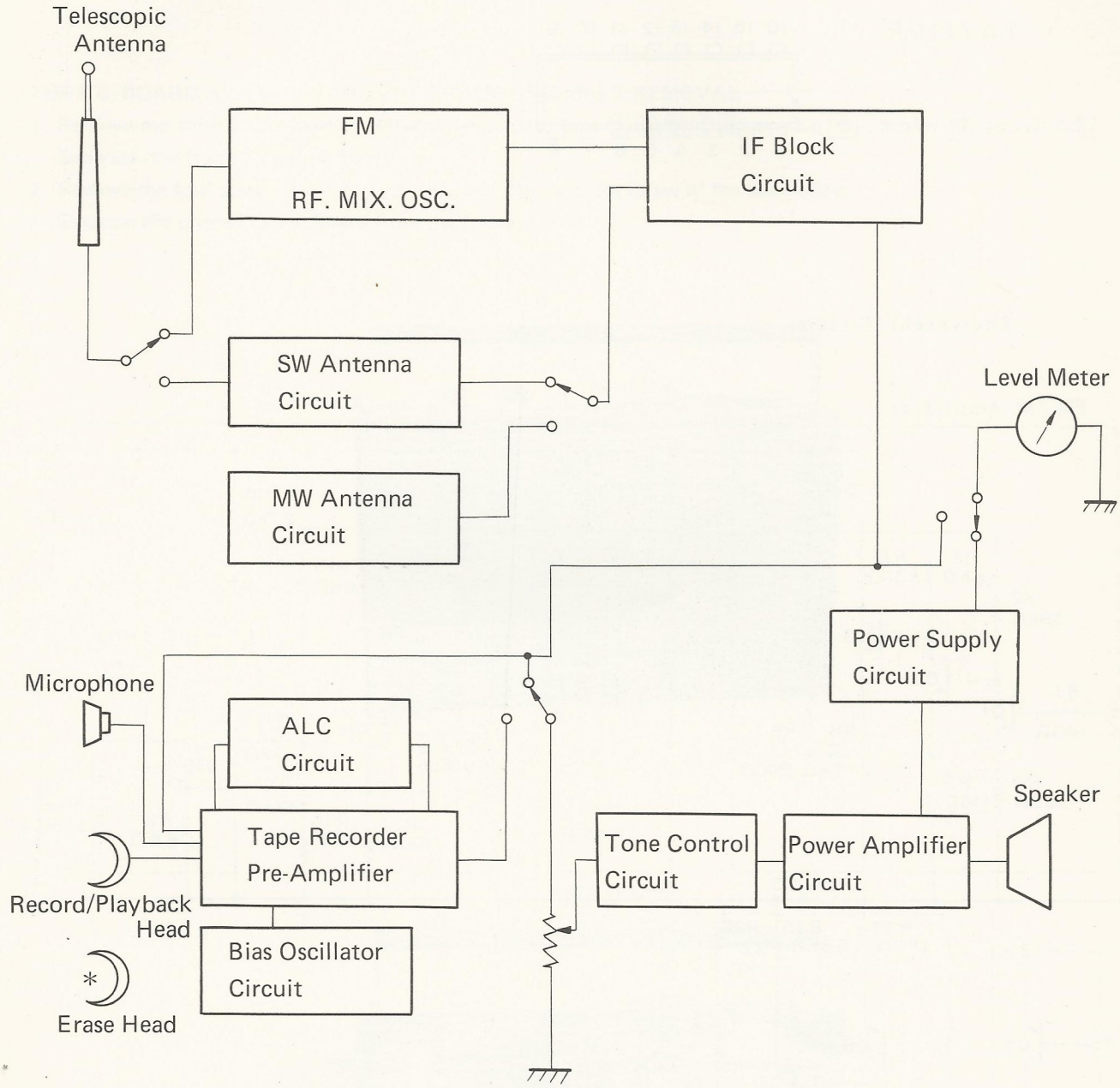


Figure 1

INTEGRATED CIRCUIT BASE DIAGRAM

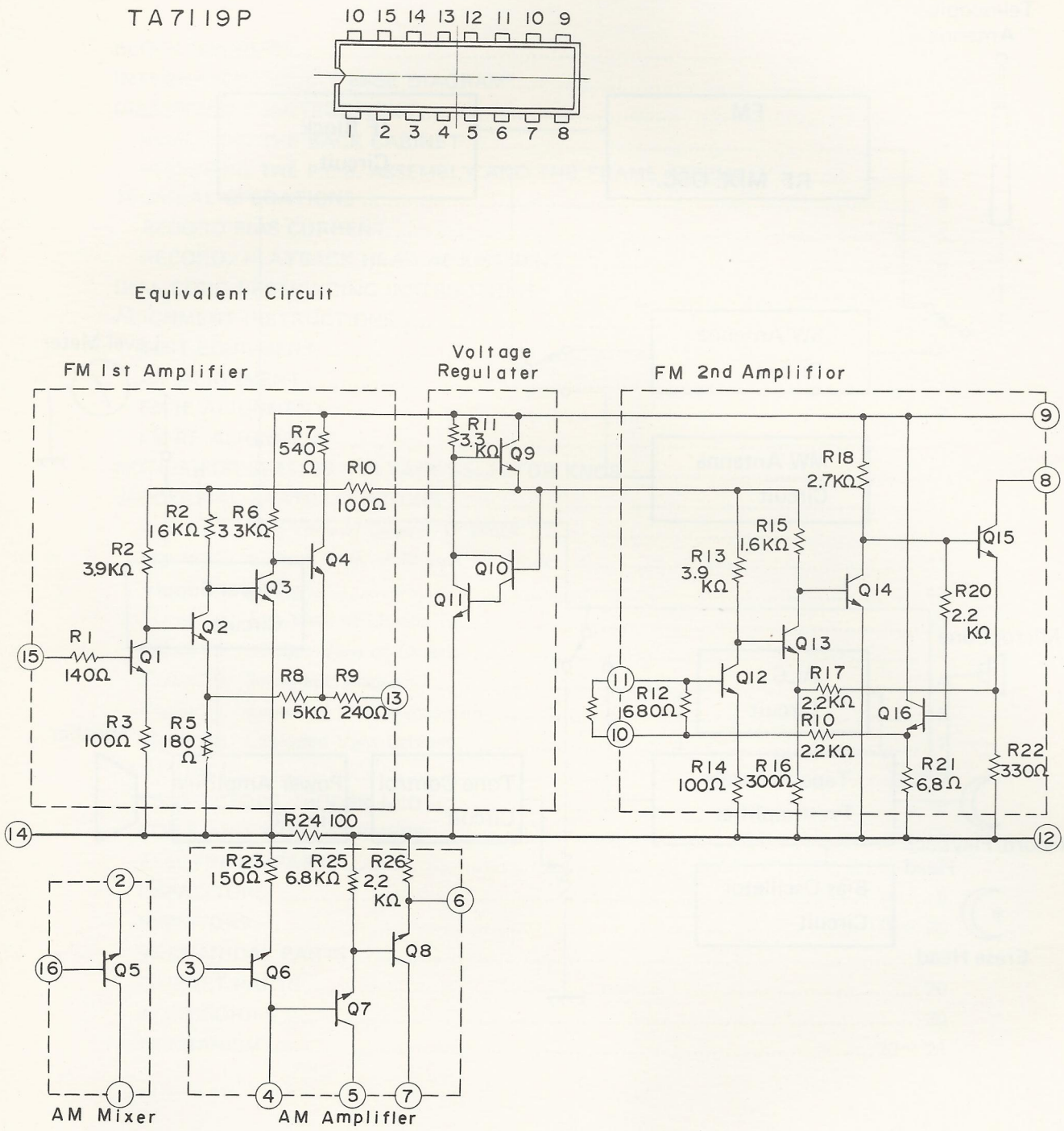


Figure 2

DISASSEMBLY INSTRUCTIONS

THE BACK CABINET REMOVAL

* Remove the six screws, Nos. ①②③④⑤ and ⑥, and disconnect the telescopic antenna lead.
Separate the back cabinet from the cabinet as shown in Figure 3.

THE P.C. BOARD ASSEMBLY AND THE FRAME ASSEMBLY REMOVAL

1. Remove the three knobs marked (※) and five screws, Nos. ①②③④⑤, one lug [6], washer [7] and stud [8].
   Separate the frame from the front cabinet.
2. Remove the four screws, Nos. △1 △2 △3 and △4, and the screw of the dial pulley.
   Separate the printed circuit board from the frame.

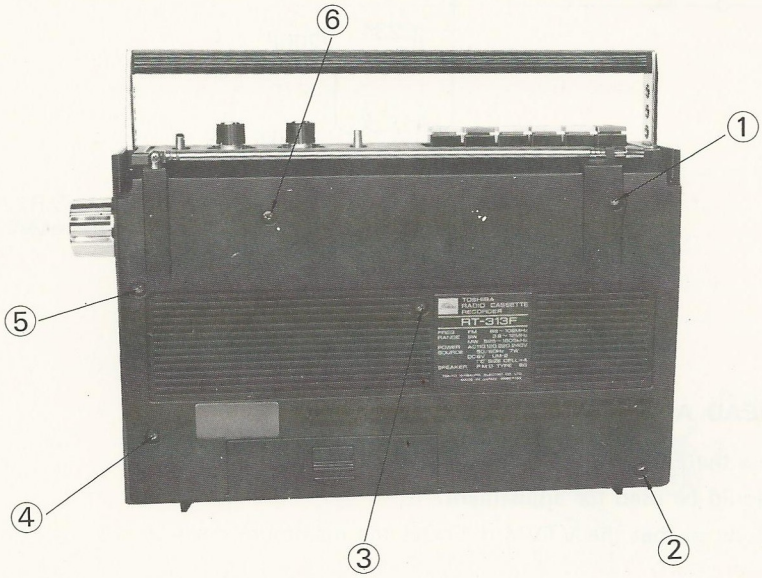


Figure 3

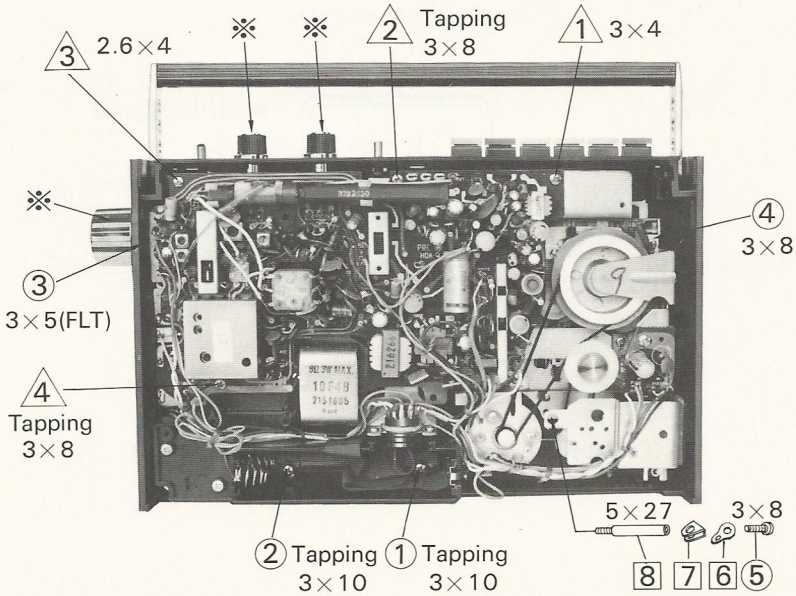


Figure 4

TECHNICAL POINTS

RECORD BIAS CURRENT

Set the tape recorder in recording mode, connect a VTVM across the resistor (R205) and adjust the resistor (R226) so that the voltage drop across the resistor is from 75mV to 80mV, when measured with a VTVM.

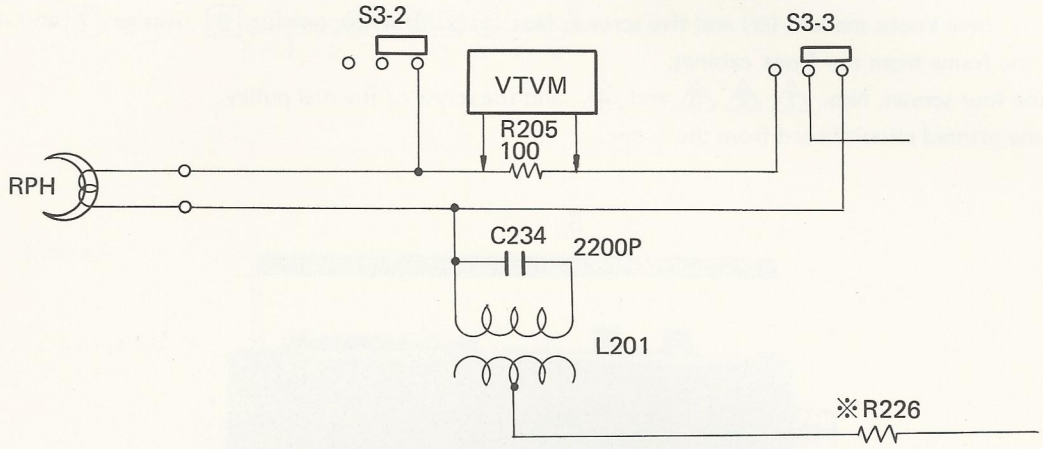


Figure 5

RECORD/PLAYBACK HEAD ADJUSTMENT

1. Connect a VTVM across the EXT. SP jack.
2. A 6.3 kHz test tape should be used for adjustment.
3. Adjust the adjusting screw so that the VTVM indicates the maximum position.

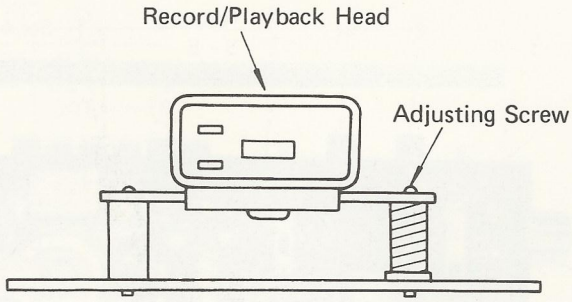


Figure 6. Record/Playback Head Adjustment

DIAL CORD RESTRINGING INSTRUCTIONS

GENERAL

1. Set the variable capacitor to the minimum capacitance (Plate fully open).
2. Tie the spring and the dial cord as shown in the illustration.
3. Insert the dial cord through the dial pulley eye and wind the cord in the numerical stringing sequence indicated in the diagram.

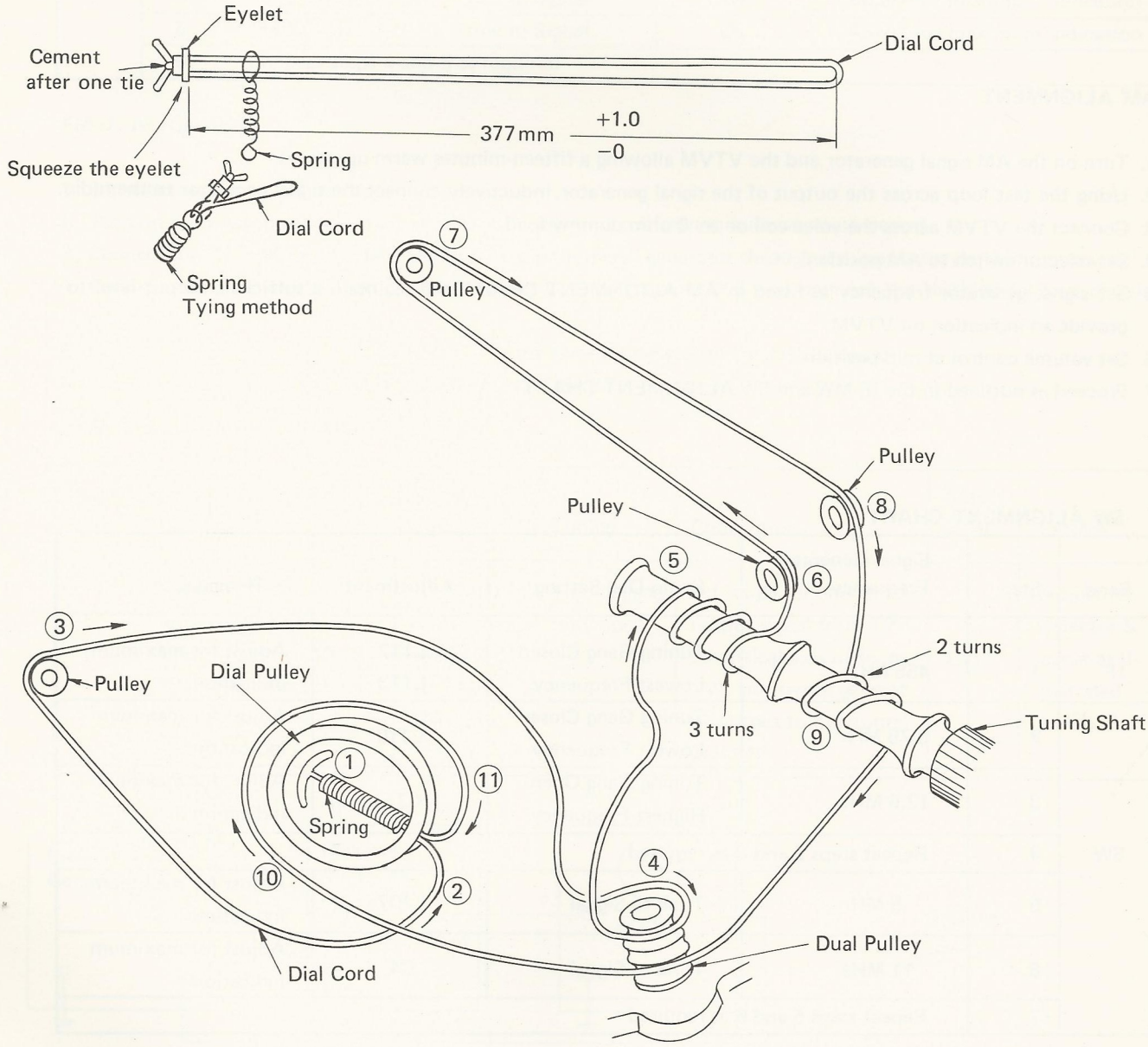


Figure 7

ALIGNMENT INSTRUCTIONS

TEST EQUIPMENT

1. AM Signal Generator.
2. FM Signal Generator with 10.7 MHz marker signal.
3. FM Sweep Generator with a wide band amplifier of approximately 500 kHz, with 10.7MHz marker signal.
4. Oscilloscope with a wide band amplifier of approximately 100 kHz.
5. Test loop – a coil of any size wire with one turn or more.
6. VTVM.
7. 75 ohm dummy antenna.

AM ALIGNMENT

1. Turn on the AM signal generator and the VTVM allowing a fifteen-minutes warm-up period.
2. Using the test loop across the output of the signal generator, inductively connect the signal generator to the radio.
3. Connect the VTVM across the voice coil or an 8 ohm dummy load.
4. Set selector switch to AM position.
5. Set signal generator frequency as listed in AM ALIGNMENT CHART and maintain a sufficient output level to provide an indication on VTVM.
6. Set volume control at mid-position.
7. Proceed as outlined in the IF-MW and SW ALIGNMENT CHART.

SW ALIGNMENT CHART

Band	Step	Signal Generator Frequency	Radio Dial Setting	Adjustment	Remarks
IF	1	455 kHz	Tuning Gang Closed Lowest Frequency	L112 L113	Adjust for maximum indication
SW	2	3.75 MHz	Tuning Gang Closed Lowest Frequency	L110	Adjust for maximum indication
	3	12.5 MHz	Tuning Gang Open Highest Frequency	C7	Adjust for maximum indication
	4	Repeat steps 2 and 3 as required			
	5	5 MHz	Tune to Signal	L107	Adjust for maximum indication
	6	11 MHz	Tune to Signal	C4	Adjust for maximum indication
	7	Repeat steps 5 and 6 as required			

MW ALIGNMENT CHART

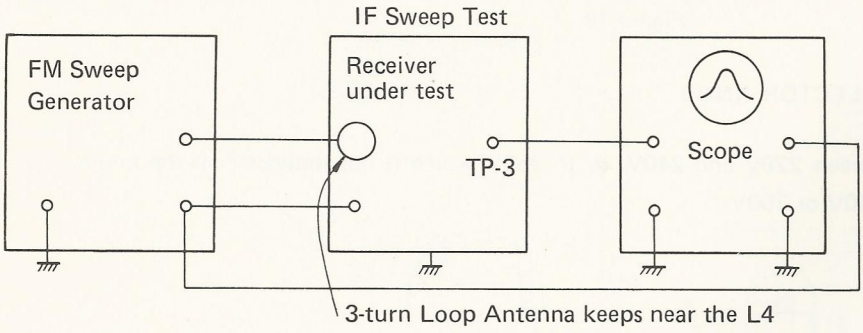
Band	Step	Signal Generator Frequency	Radio Dial Setting	Adjustment	Remarks
MW	1	520 kHz	Tuning Gang Closed Lowest Frequency	L109	Adjust for maximum indication
	2	1660 kHz	Tuning Gang Open Highest Frequency	C6	Adjust for maximum indication
	3	Repeat steps 1 and 2 as required			
	4	600 kHz	Tune to Signal	L108	Adjust for maximum indication
	5	1400 kHz	Tune to Signal	C5	Adjust for maximum indication
	6	Repeat steps 4 and 5 as required			

FM-IF ALIGNMENT

1. Set select switch to FM position.
2. Turn on both sweep generator and oscilloscope, allowing a fifteen-minute warm-up period.
3. Connect the RF SWEEP SIGNAL OUTPUT from the signal generator through the loop antenna to the receiver.
4. Connect the oscilloscope vertical input directly to test point TP-3 and connect the shielded lead to chassis ground.
5. Connect the SWEEP VOLTAGE OUTPUT of the sweep generator to the oscilloscope.
6. Proceed as outlined in the FM-IF ALIGNMENT CHART.

FM-IF ALIGNMENT CHART

Step	Signal coupling	Equip.	Tuning	Connection	Adjust. point	Pattern
1	Connect sweep generator output to thru three-turn 10cm diameter loop antenna.	10.7 MHz center freq. sweep with 10.7 MHz Marker	Tuning gang fully open	Set scope for connecting output signal from TP-3 to vertical axis of scope "V" and sweep generator output to horizontal axis "H"	L111	Adjust for detector S curve as illustrated in Fig. 8



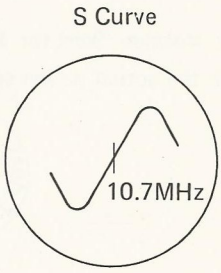


Figure 9

Generator Coupling Hook-up

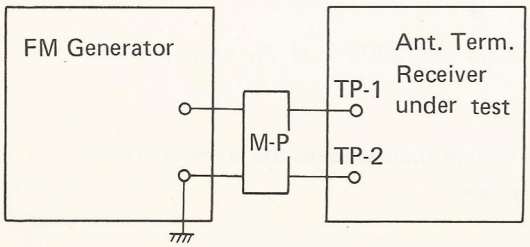


Figure 8

FM-RF ALIGNMENT

1. Turn on the signal generator and the VTVM allowing a fifteen-minute warm-up period.
2. Connect the signal generator output through a 75 ohm matching plug across TP-1.
3. Connect the VTVM across the voice coil or an 8 ohm dummy load.
4. Set Volume Control to mid-position.
5. Adjust signal generator frequency as indicated in FM-RF ALIGNMENT CHART, and maintain a sufficient signal output level to provide a measurable indication.
6. Proceed as outlined in the FM-RF ALIGNMENT CHART.

CAUTION:

When realigning the FM Receiving Frequency, the lowest side of the frequency range must not be below 87.5 MHz in order to comply with FTZ regulations in West Germany.

FM-RF ALIGNMENT CHART

Step	Signal Generator	Radio Dial Setting	Adjustment	Remarks
1	87.3 MHz	Tuning Gang Closed Lowest Frequency	L104	Adjust for maximum output indication
2	109 MHz	Tuning Gang Open Highest Frequency	C2	Adjust for maximum output indication
3	Repeat steps 1 and 2 as required.			
4	90 MHz	Tune for signal	L102	Adjust for maximum output indication
5	106 MHz		C3	
6	Repeat steps 4 and 5 as required.			

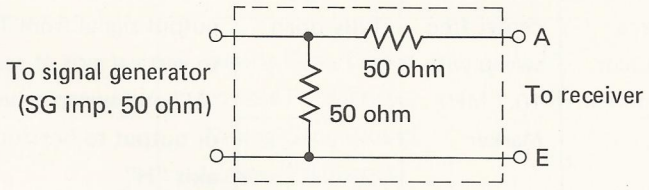


Figure 10

NOTICE FOR SETTING VOLTAGE SELECTOR KNOB

Do not set Voltage Selector knob, between 220V and 240V, or to 250V which is not indicated on the knob, even though the actual power source is 230V or 250V.

As seen clearly from the above illustrations the knob inserted between 220V and 240V is at the same position as it is set at 110V, and 250V same as at 120V.

In case of resetting, make sure the knob is inserted correctly, setting the voltage indication to the arrow, in order to prevent the power transformer and the set itself being damaged or burnt out.

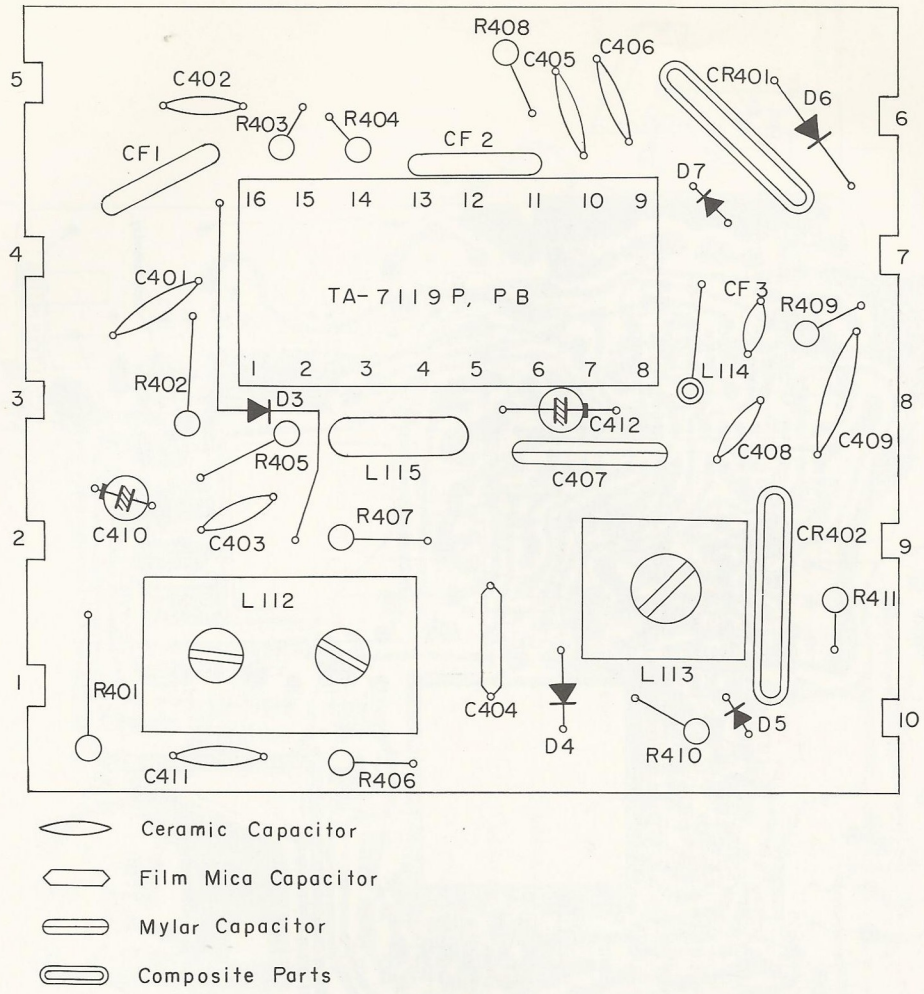


Figure 11. Top View of Chassis, IF Block

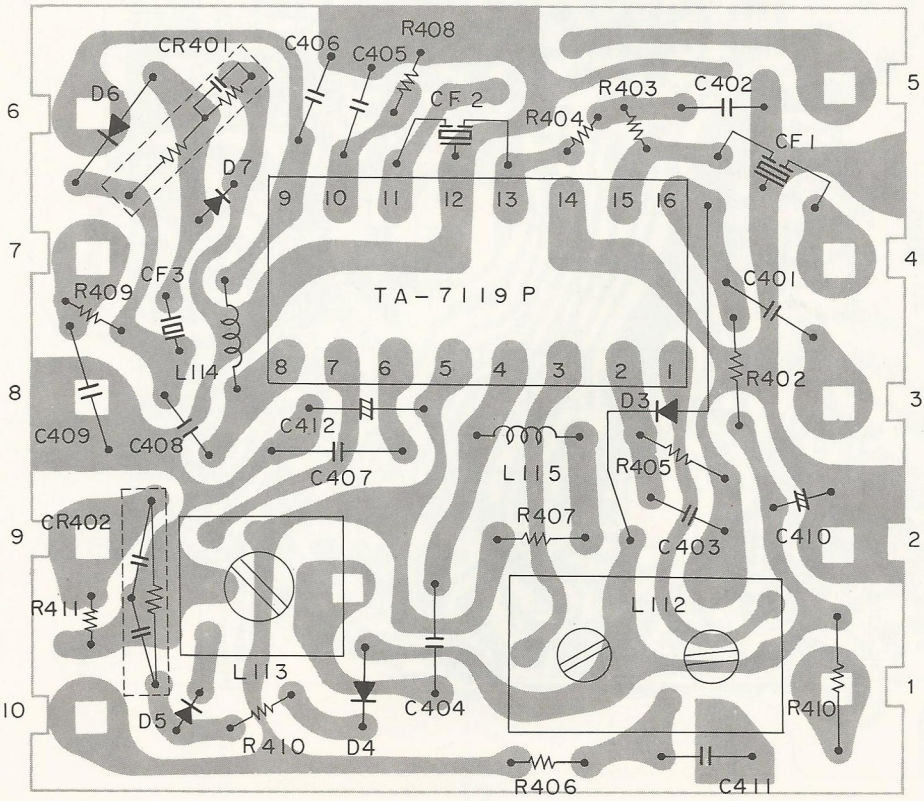


Figure 12. Bottom View of Chassis, IF Block

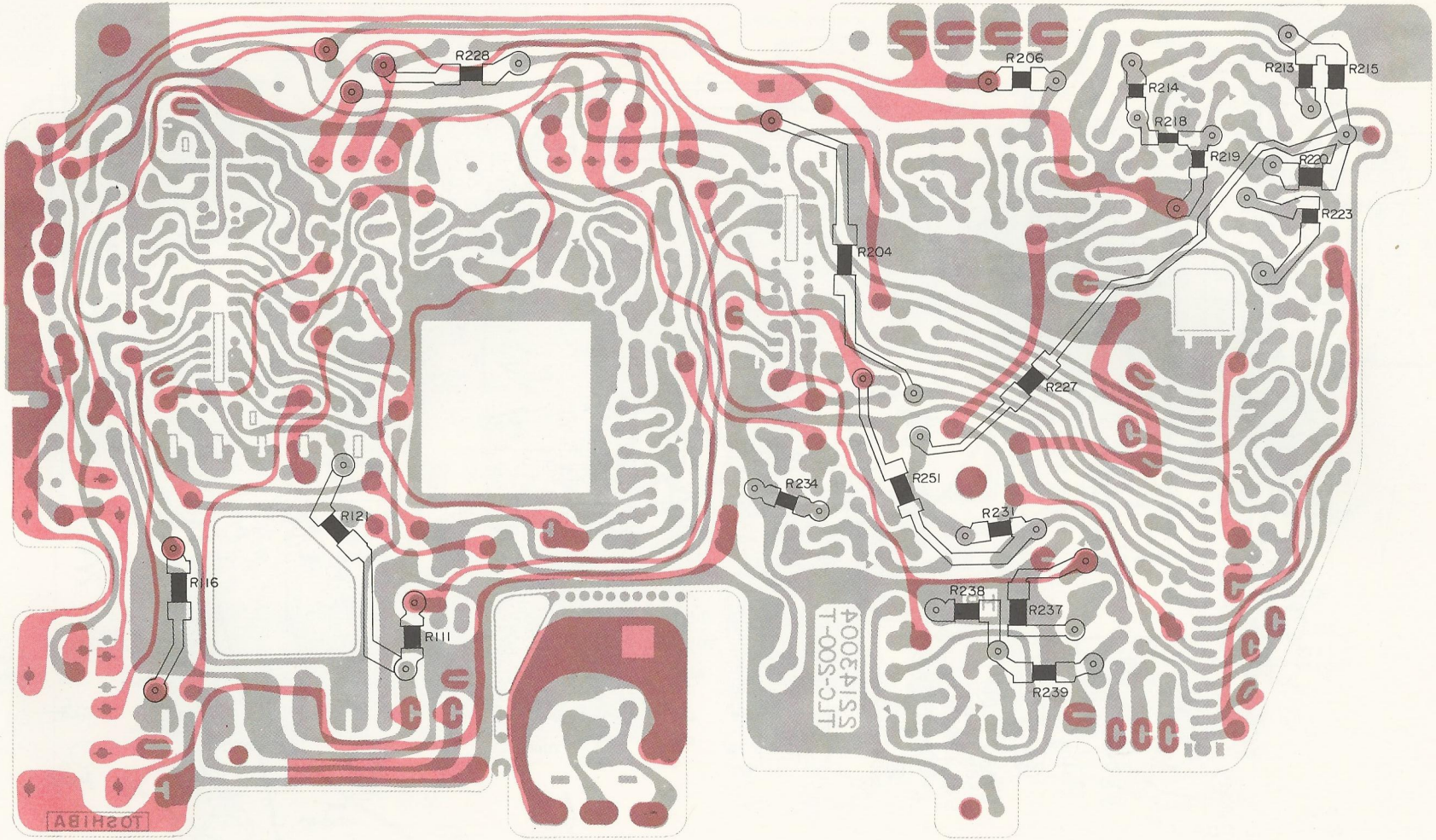
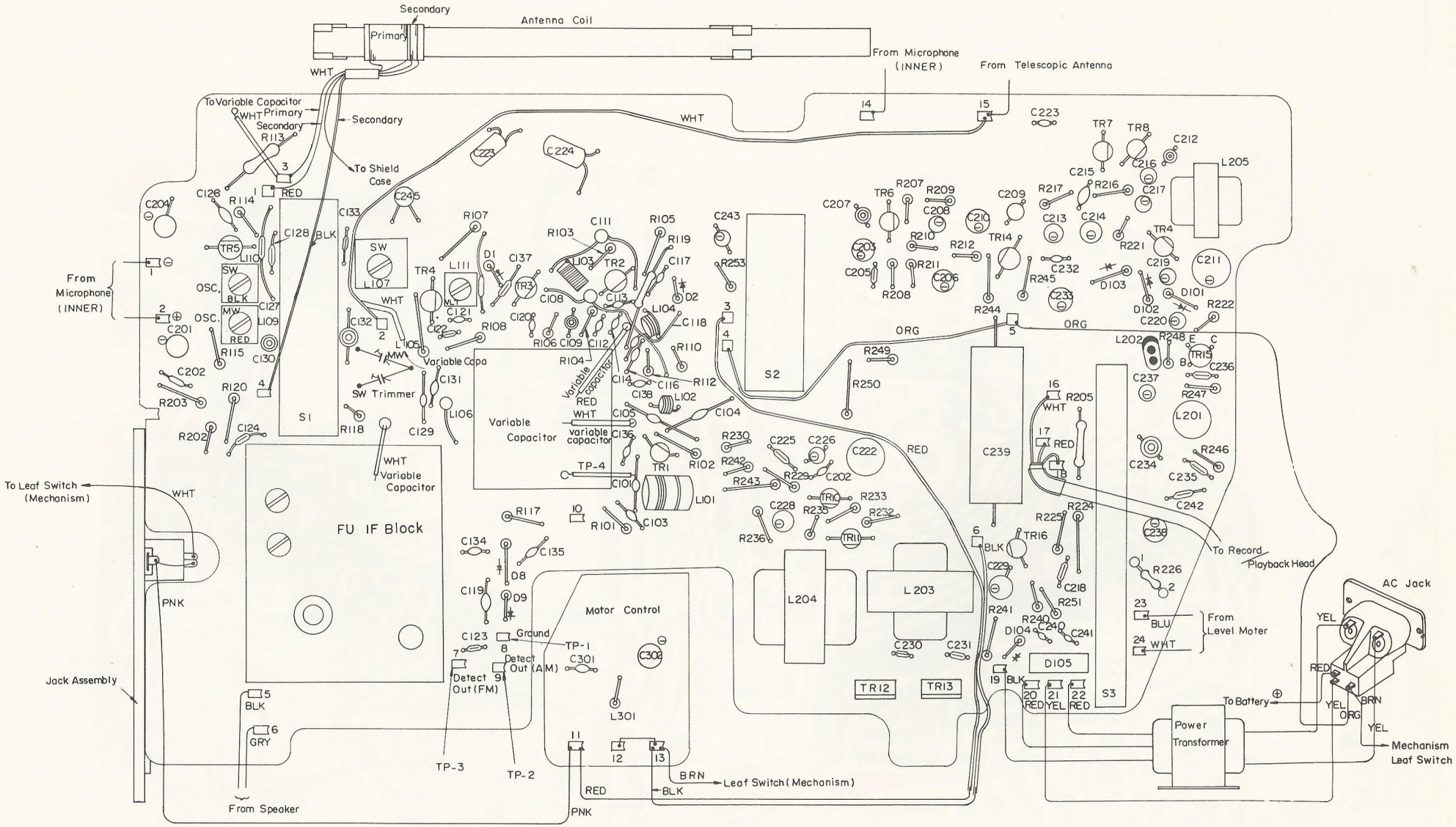
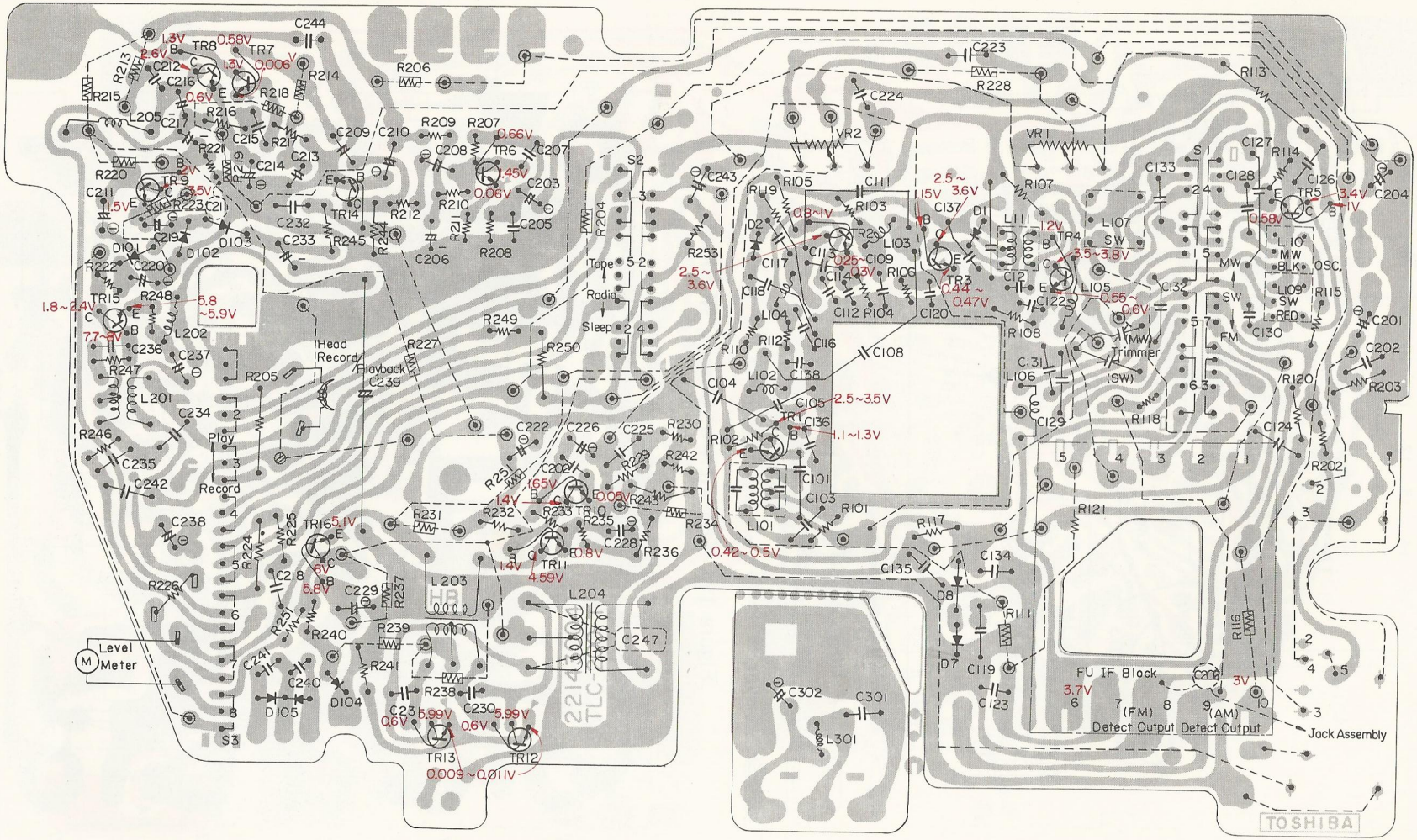


Figure 13. Wiring


Secondary
Primary
Antenna Coil
From Microphone (INNER)
From Telescopic Antenna
WHT
To Variable Capacitor
Primary
Secondary
Secondary
To Shield Case
From Microphone (INNER)
OSC.
BLK
MW
RED
SW
L107
WHT
Variable Capa
SW Trimmer
Variable Capacitor
S1
FU IF Block
To Leaf Switch (Mechanism)
PNK
Jack Assembly
BLK
GRY
From Speaker
Variable Capacitor
RED
WHT
variable capacitor
TP-4
Motor Control
Ground
TP-1
Detect Out (AM)
Detect Out (FM)
TP-3
TP-2
L301
BRN
Leaf Switch (Mechanism)
BLK
RED
PNK
S2
C239
S3
L204
L203
TR12
TR13
D105
ORG
RED
To Record
Playback Head
From Level Meter
BLU
WHT
AC Jack
YEL
RED
BRN
ORG
YEL
To Battery
Power Transformer
Mechanism Leaf Switch


Head
Record
Playback
Play
Record
Tape
Radio
Sleep
Level
Meter
FU IF Block
(FM)
Detect Output
(AM)
Detect Output
Jack Assembly
TOSHIBA

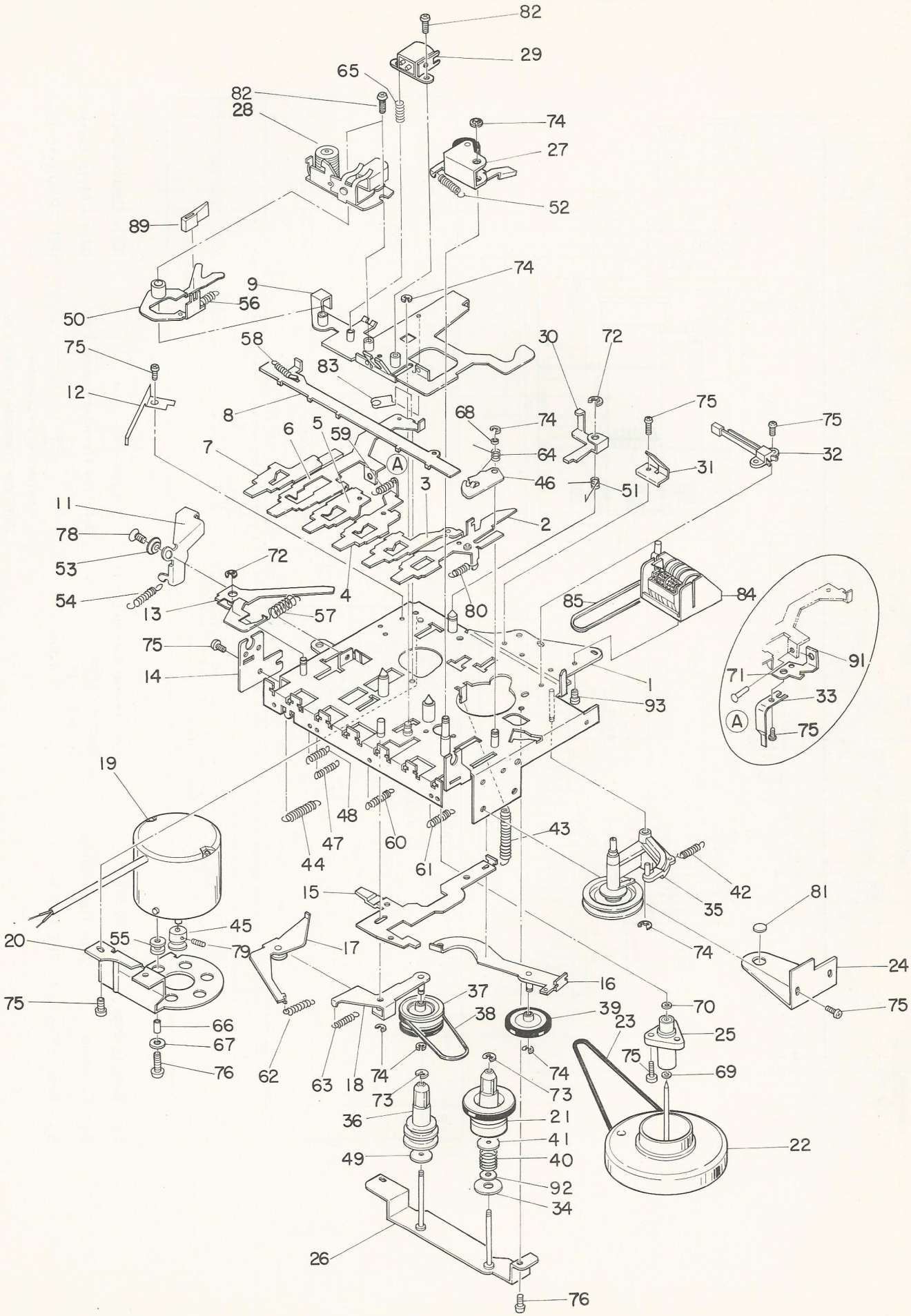


Figure 17. Exploded View-Mechanism

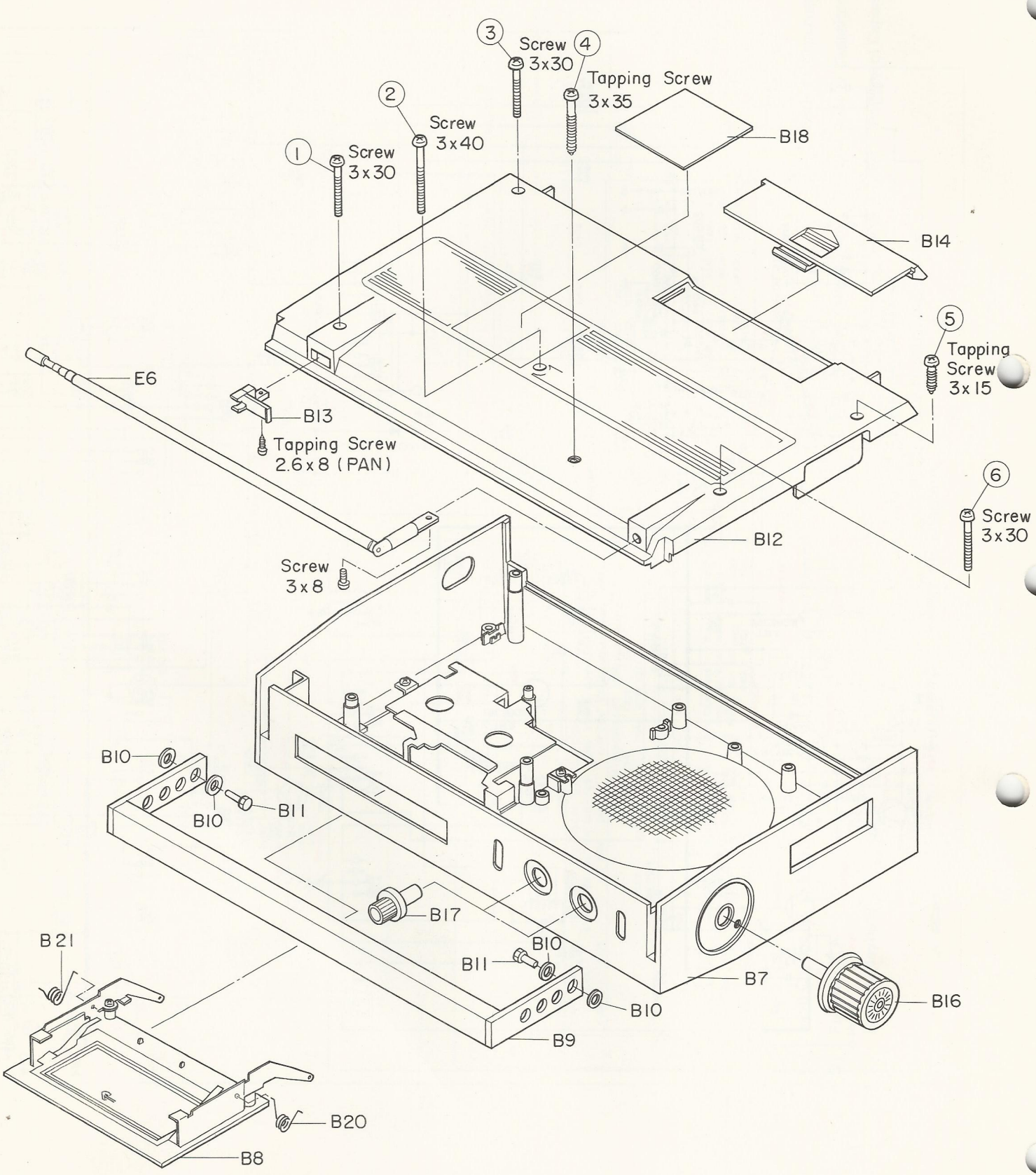


Figure 18. Exploded View-Cabinet

PARTS LISTS

Symbol No.	Part No.	Description
TRANSISTORS, DIODES & IC		
TR1		Transistor, 2SC784-0
TR2, 3		Transistor, 2SC785-R/0
TR4, 5		Transistor, 2SC380A-0
TR6		Transistor, 2SC1000-GR
TR7		Transistor, 2SC732-BL
TR8		Transistor, 2SC373
TR9		Transistor, 2SC372-0/Y
TR10		Transistor, 2SC1000-GR
TR11		Transistor, 2SC733-GR/BL
TR12, 13		Transistor, 2SC1173-0/Y
TR14		Transistor, 2SC733-GR/BL
TR15		Transistor, 2SB56-A
TR16		Transistor, 2SC735-0
IC1		IC, TA-7119P
D1		Diode, 1S1555
D2		Diode, 1S2236
D3	22115201	Diode, 0A90
D4		Diode, 1S1555
D5		Diode, 1N60
D6, 7		Diode, 1N60, FD1
D8, 9		Diode, M8513
D101		Diode, 1N60
D102		Diode, 1N60
D103		Diode, 1N60
D104		Diode, 1S1555
D105		Diode, 1B2C1
COILS & TRANSORMERS		
L101	22294068	Coil, RF, FM, LH-8030
L102	22294016	Coil, RF, FM, LH-8404R
L103	22294117	Coil, RF, FM, LH-8002
L104	22294022	Coil, RF, FM, LH-8403L
L105	22291058	Coil, Choke, FM, LH-09A
L106	22291066	Coil, Choke, FM, LH-09-1066
L107	22282131	Coil, RF, LH-5081
L108	22242530	Coil, Antenna, with Ferrite
L109	22245169	Coil, Oscillator, LH-7275, MW
L110	22285197	Coil, RF, 73D5197, SW
L111	22265489	Transformer, IF, IT-07327
L112	22264635	Transformer, IF, IT-07485
L113	22266310	Transformer, IF, IT-07484
L114	22294054	Coil, FM, LH-9052
L115	22241026	Coil, Antenna, LH-621J-026
L201	22235148	Coil, Oscillator, Tape
L202	22291003	Coil, Choke, LH-400
L203	22214292	Transformer, DT-11906
L204	22216266	Transformer, Output
L205	22211159	Coil, Choke, LF
L301	22291012	Coil Choke, RF, LH-9043A
L302	22213907	Transformer, Power

Symbol No.	Part No.	Description
ELECTRICAL PARTS		
E1	22163450	Jack, AC
E2	22104203	Level Meter
S4	22145985	Switch, Leaf
E5	22151605	Speaker, 10F4B
E6	22124457	Telescopic Antenna
E7	22154134	Microphone Unit
E8	22133509	IF Block
E9	22163405	Jack Assembly
CR1	22134080	Composite Parts
CR2	22134033	Composite Parts, CRF-42
CF1, 2, 3	22153037	Ceramic Filter, KMFC-21
S1	22146672	Switch, Slide, FM, SW, MW Change
S2	22146602	Switch, Slide, Function
S3	22146590	Switch, Slide, Record/Playback
CAPCITORS		
D= ±0.5PF, J= ±5%, K= ±10%, M= ±20%, Z= -20+80%, P= -0+100%		
C1, 2, 3, 4, 5	22308113	Variable
C6, 7	22309036	Trimmer
C101	22361209	Ceramic, 2PF, D
C102	22361100	Ceramic, 10PF, D
C103	22342223	Ceramic, 0.022 mfd, Z
C104	22342223	Ceramic, 0.022 mfd, Z
C105	22342223	Ceramic, 0.022 mfd, Z
C106	22342223	Ceramic, 0.022 mfd, Z
C107	22361220	Ceramic, 22PF, D
C108	22361709	Ceramic, 7PF, D
C109	22382331	Polystyrol, 330PF, K
C110	22361150	Cramic, 15PF, J
C111	22361509	Ceramic, 5PF, D
C112	22361100	Ceramic, 10PF, D
C113	22361220	Ceramic, 22PF, D
C114	22342223	Ceramic, 0.022 mfd, Z
C115	22361220	Ceramic, 22PF, D
C116	22342223	Ceramic, 0.022 mfd, Z
C117	22361309	Ceramic, 3PF, D
C118	22342473	Ceramic, 0.047 mfd, Z
C119	22342473	Ceramic, 0.047 mfd, Z
C120	22342223	Ceramic, 0.022 mfd, Z
C121	22342223	Ceramic, 0.022 mfd, Z
C122	22373103	Mylar, 0.01 mfd, M
C123	22373103	Mylar, 0.01 mfd, M
C124	22373333	Mylar, 0.033 mfd, M
C126	22342103	Ceramic, 0.01 mfd, Z
C127	22373103	Mylar, 0.01 mfd, M

Symbol No.	Part No.	Description
C128	22373222	Mylar, 0.0022 mfd, M
C129	22361100	Ceramic, 10PF, D
C130	22382301	Polystyrol, 300PF, K
C131	22361100	Ceramic, 10PF, D
C132	22382182	Polystyrol, 1800PF, K
C133	22362220	Ceramic, 22PF, K
C134	22342223	Ceramic, 0.022 mfd, Z
C135	22342223	Ceramic, 0.022 mfd, Z
C136	22342223	Ceramic, 0.022 mfd, Z
C137	22373333	Mylar, 0.033 mfd, M
C138	22342223	Ceramic, 0.022 mfd, Z
C201	22448478	Electrolytic, 0.47 mfd, 50V
C202	22373333	Mylar, 0.033 mfd, M
C203	22447339	Electrolytic, 3.3 mfd, 35V
C204	22443330	Electrolytic, 33 mfd, 10V
C205	22373152	Mylar, 1500PF, M
C206	22443101	Electrolytic, 100 mfd, 10V
C207	22382331	Polystyrol, 330PF, K
C208	22448478	Electrolytic, 0.47 mfd, 50V
C209	22448478	Electrolytic, 0.47 mfd, 50V
C210	22443101	Electrolytic, 100 mfd, 10V
C211	22340002	Ceramic, 0.1 mfd, Z
C212	22382101	Polystyrol, 100PF, K
C213	22445100	Electrolytic, 10 mfd, 16V
C214	22443101	Electrolytic, 100 mfd, 10V
C215	22340004	Ceramic, 0.5 mfd, Z
C216	22443479	Electrolytic, 3.3 mfd, 35V
C217	22443379	Electrolytic, 3.3 mfd, 35V
C218	22373104	Mylar, 0.1 mfd, M
C219	22446479	Electrolytic, 4.7 mfd, 25V
C220	22448478	Electrolytic, 0.47 mfd, 50V
C221	22443221	Electrolytic, 220 mfd, 10V
C222	22443221	Electrolytic, 220 mfd, 10V
C223	22373103	Mylar, 0.01 mfd, M
C224	22373473	Mylar, 0.047 mfd, M
C225	22373104	Mylar, 0.1 mfd, M
C226	22447339	Electrolytic, 3.3 mfd, 35V
C227	22343222	Ceramic, 0.0022 mfd, M
C228	22443101	Electrolytic, 100 mfd, 10V
C229	22443221	Electrolytic, 220 mfd, 10V
C230	22373333	Mylar, 0.033 mfd, M
C231	22373333	Mylar, 0.033 mfd, M
C232	22343102	Ceramic, 0.001 mfd, M
C233	22442331	Electrolytic, 330 mfd, 6.3V
C234	22382222	Polystyrol, 2200PF, K
C235	22373472	Mylar, 0.0047 mfd, M
C236	22373223	Mylar, 0.022 mfd, M
C237	22443330	Electrolytic, 33 mfd, 10V
C238	22443221	Electrolytic, 220 mfd, 10V
C239	22453102	Electrolytic, 1000 mfd, 10V
C240	22342223	Ceramic, 0.022 mfd, Z
C241	22342223	Ceramic, 0.022 mfd, Z
C242	22373153	Mylar, 0.015 mfd, M
C243	22447339	Electrolytic, 3.3 mfd, 35V
C244	22342223	Ceramic, 0.022 mfd, Z

Symbol No.	Part No.	Description
C245	22343271	Ceramic, 270PF, M
C246	22342103	Ceramic, 0.01 mfd, Z
C247	22373103	Mylar, 0.01 mfd, M
C248	22342223	Ceramic, 0.022 mfd, Z
C301	22342223	Ceramic, 0.022 mfd, Z
C302	22443221	Electrolytic, 220 mfd, 10V
C401	22341103	Ceramic, 0.01 mfd, P
C402	22341103	Ceramic, 0.01 mfd, P
C403	22341103	Ceramic, 0.01 mfd, P
C404	22382201	Polystyrol, 200PF, K
C405	22341103	Ceramic, 0.001 mfd, P
C406	22341223	Ceramic, 0.022 mfd, P
C407	22373393	Ceramic, 0.039 mfd, M
C408	22362470	Ceramic, 47PF, K
C409	22305007	Film Mica, 200PF, K
C410	22445100	Electrolytic, 10 mfd, 16V
C411	22341103	Ceramic, 0.01 mfd, P
C412	22443101	Electrolytic, 100 mfd, 10V

RESISTORS

1. **Resistors are 1/8W, ±10%, unless otherwise noted.**
2. **PRC is printed resistor circuit. To replace one, please use the following substitutional fixed carbon film resistor 1/8W, 10%.**

R101	22554102	1K ohm
R102	22554183	18K ohm
R103	22554153	15K ohm
R104	22554471	470 ohm
R105	22554333	33K ohm
R106	22554122	1.2K ohm
R107	22554472	4.7K ohm
R108	22554331	330 ohm
R110	22554104	100K ohm
R111 (PRC)	22544104	100K ohm
R112	22554680	68 ohm
R113	22554223	22K ohm
R114	22554821	820 ohm
R115	22554331	330 ohm
R116 (PRC)	22544331	330 ohm
R117	22554102	1K ohm
R118	22554562	5.6K ohm
R119	22554224	220K ohm
R120	22554471	470 ohm
R121 (PRC)	22544822	8.2K ohm
R202	22554394	390K ohm
R203	22554821	820 ohm
R204 (PRC)	22554153	100K ohm
R205	22544101	100 ohm
R206 (PRC)	22544101	1K ohm
R207	22554184	180K ohm
R208	22554224	220K ohm
R209	22554152	1.5K ohm
R210	22554472	4.7K ohm
R211	22554221	220 ohm

Symbol No.	Part No.	Description
R212	22554223	22K ohm
R213 (PRC)	22544103	10K ohm
R214 (PRC)	22544333	33K ohm
R215 (PRC)	22544221	220 ohm
R216	22554153	15K ohm
R217	22554470	47 ohm
R218 (PRC)	22544333	33K ohm
R219 (PRC)	22544331	330 ohm
R220 (PRC)	22544273	27K ohm
R221	22554563	56K ohm
R222	22554101	100 ohm
R223 (PRC)	22544122	1.2K ohm
R224	22554123	12K ohm
R225	22554272	2.7K ohm
R226	22554471	470 ohm
R227 (PRC)	22544331	330 ohm
R228 (PRC)	22544103	10K ohm
R229	22554103	10K ohm
R230	22554222	2.2K ohm
R231 (PRC)	22544101	100 ohm
R232	22554123	12K ohm
R233	22554473	47K ohm
R234 (PRC)	22544221	220 ohm
R235	22554820	82 ohm
R236	22554150	15 ohm
R237 (PRC)	22544152	1.5K ohm
R238 (PRC)	22544391	390 ohm
R239 (PRC)	22544680	68 ohm
R240	22554561	560 ohm
R241	22554508	0.5 ohm
R242	22554560	56 ohm
R243	22554154	150K ohm
R244	22554333	33K ohm
R245	22554221	220 ohm
R246	22554103	10K ohm
R247	22554223	22K ohm
R248	22554330	33 ohm
R249	22554222	2.2K ohm
R250	22554224	220K ohm
R251	22554333	33K ohm
R252 (PRC)	22554101	100 ohm
R253	22554472	4.7K ohm
VR1	22636400	Variable, 50K ohm, D, 16
VR2	22635401	Variable, 50K ohm, B, 16
R401	22554223	22K ohm
R402	22554332	3.3K ohm
R403	22554681	680 ohm
R404	22554372	2.7K ohm
R405	22554471	470 ohm
R406	22554101	100 ohm
R407	22554151	150 ohm
R408	22554822	8.2K ohm
R409	22554392	3.9K ohm
R410	22554103	10K ohm
R411	22554392	3.9K ohm

Symbol No.	Part No.	Description
	MECHANICAL PARTS	
M1	22764018	Spring, Battery
M2	25830115	Ribbon
M3	25839186	Plate, Battery
M4	22741174	Pointer
M5	22742077	Dial Pulley
M6	22999222	Dial Cord, 0.5 DIA.
M7	22749113	Tuning Shaft
M8	22752232	Spacer
M9	25761271	Rubber, Meter, Left
M10	25771548	Spring, Dial Pulley
M11	25816329	Lever, Switch Assembly
M12	22721196	Holder, Antenna
M13	25816360	Band Lever Assembly
M14	25827127	Dial Plate
	CABINET PARTS	
B1	25854205	Cap, Switch
B2	25854216	Cap, Switch
B3	25816364	Push Button Assembly, Ivory
B4	25816365	Push Button Assembly, Blue
B5	25816366	Push Button Assembly, Red
B6	25854201	Cover, AC Jack
B7	25811437	Cabinet Front Assembly
B8	25812464	Cassette Cover Assembly
B9	25815155	Handle Assembly
B10	25835239	Spacer Handle
B11	25835244	Shaft, Handle
B12	25811396	Cabinet Back Assembly
B13	22875026	Clamp, Antenna
B14	25811349	Battery Cover Assembly
B15	25854239	Cover, Jack
B16	25826466	Knob, Tuning
B17	25826474	Knob, Volume
B18	25827229	Nameplate, Main
B19	25833279	Cover, Knob
	ACCESSORIES	
	22105323	Cassette Tape, C-30
	22176483	Power Cord, E2ESSET
	22950270	Caution Label
	22954091	Owner's Manual
	22152025	Earphone, ER-1427C
	MECHANISM	
2	25710523	Assembly, Operation Plate, Pause
6, 33, 71	25718136	Assembly, Operation Plate, Record
12	25774223	Spring, ASO Lock
19, 45, 79	25711083	Motor Assembly
21	25712256	Hub Plate, Take-up
22	25717218	Flywheel and Capstan
23	25755247	Belt, Drive
25	25718135	Bearing, Capstan Shaft
27	25717219	Pressure Roller Assembly
28	25711009	Head Assembly, Erase

Symbol No.	Part No.	Description
29	22217158	Head, Record/Playback
34	25764246	Washer, Hub Plate, Take-up
35	25713343	Pulley, Take-up
36	25712272	Hub Plate, Supply
37	25713312	Pulley, Rewind
38	25755171	Belt, Rewind
39	25713281	Idler, Fast Forward
40	25772154	Spring, Hub Plate, Take-up
41	25764298	Washer, Hub Plate, Take-up
42, 43	25771609	Spring, Take-up Lever
44	25771603	Spring, Stop Operation Plate
46	25742576	Spring, Rewind Operation Plate
47	25771601	Spring, Rewind Operation Plate
48	25771404	Spring, Record Operation Plate
49	25764196	Washer, Hub Plate Supply
51	25773152	Spring, Record Lock
52	25771453	Spring, Pressure Roller
55	25761238	Cushion, Rubber, Motor
56	25771610	Spring, ASO Lever
57	25771414	Spring, ASO Drive
59	25771567	Spring, Rewind Lever B
60	25771601	Spring, Play Operation Plate
61	25771597	Spring, Fast Forward Operation Plate
62	25771578	Spring, Fast Forward Lever
64	25773161	Spring, Pause Lock
65	25772240	Spring, Head
66	25726235	Spacer, Motor
67	25735202	Washer, Motor
69	25764398	Washer, Flywheel
70	25764396	Washer, Capstan Shaft
73	25735159	Retaining Ring, 1.5 Dia.
78	22701361	Screw, 2.6+5
80	25771408	Spring, Pause Operation
81	25764301	Sheet, Nylon
83	25773214	Spring, Torsion
84	25873143	Counter
85	25755226	Belt, Counter
89	25764351	Cap, ASO
90	25771572	Spring, Play Slider
91	25771600	Spring, Play Slider
92	25764394	Washer, Nylon
96	25771544	Spring, Rewind Pulley