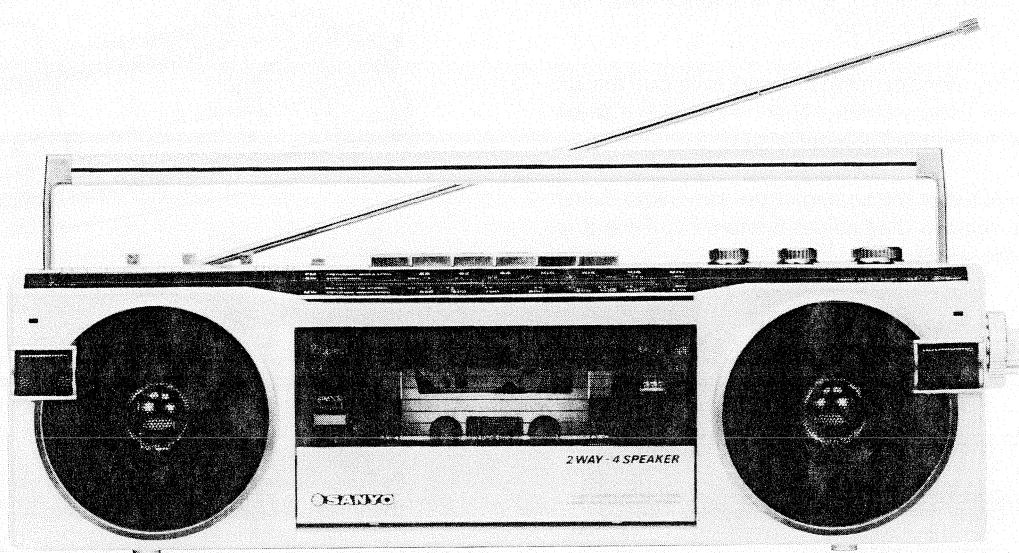


SERVICE MANUAL



MINI STEREO CASSETTE RECORDER

M7770K



142 340 24

SPECIFICATIONS

Power Source		Erase Ratio (Overall, with Fe ₂ O ₃)	60dB
DC	9V (UM-2, HP11, C Cell, Babyzelle, R14) × 6	Signal to Noise Ratio (with Fe ₂ O ₃)	48dB
Output Power	3.5W × 2 (Max.)	Crosstalk (with Fe ₂ O ₃)	
Power Consumption	9W	Track to Track	50dB
Current Consumption (at Vol. Min.)		Hum & Noise (at Vol. Min.)	-60dBs
Record mode	265mA	Input Sensitivity and Impedance	
Playback mode	175mA	MIC.	0.3mV/3.3kΩ
Fast Forward mode	155mA	LINE IN	100mV/100kΩ
Rewind mode	165mA	Output Level and Impedance	
Recording System	AC Bias	LINE OUT	300mV/2.2kΩ
Erasing System	AC Erasing	Ext. Speaker	2 ~ 32Ω
Tape Speed	1-7/8 ips, ±3%	Headphone	32Ω
Wow & Flutter	0.15% WRMS	Frequency Range	
Fast Forward Time	110sec. (with C-60)	MW	525 ~ 1,605 kHz
Rewind Time	110sec. (with C-60)	SW1	2.3 ~ 7.3MHz
Frequency Response (Overall)		SW2	7.3 ~ 23MHz
Fe ₂ O ₃	40Hz ~ 13,000Hz	FM	88 ~ 108MHz
CrO ₂	40Hz ~ 14,000Hz		
Metal	40Hz ~ 16,000Hz		

—Specifications subject to change without notice.—

WM-9000

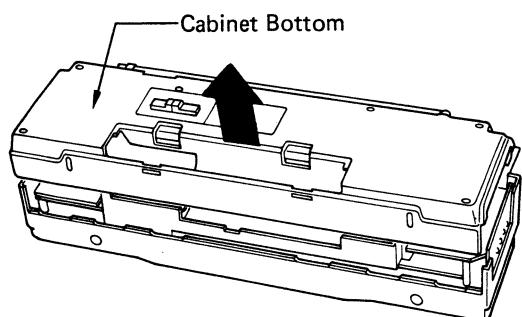
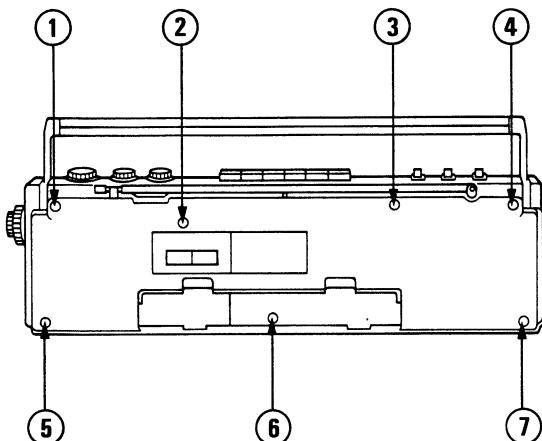
DISASSEMBLY INSTRUCTIONS

GENERAL REMARKS

- Before disassembling the unit, spread a soft cloth or a rubber mat on the work bench to avoid scratches and grease stains.
- Do not spread anything which is likely to cause static electricity because transistors and ICs are easily broken by it.
- Correctly reassemble the unit, noting the kinds of fastening screws and the lead arrangement. Please refer to "Schematic Diagrams" and "Exploded Views".

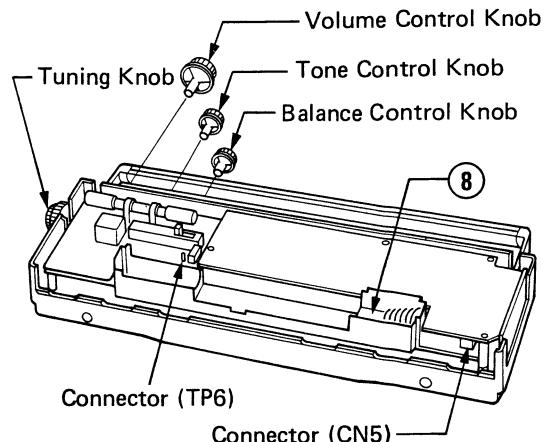
CABINET BOTTOM ASSEMBLY REMOVAL

1. Take out the cassette tape from the compartment by pressing the STOP/EJECT button.
2. Remove the battery compartment lid and take out the six batteries from the compartment. Then, remove the seven screws (1 - 7) fastening the Cabinet Bottom.
3. Pull out the connector of the antenna from the Radio Tuner P.C.Board. Then, remove the Cabinet Bottom by lifting it in the direction of the arrow.

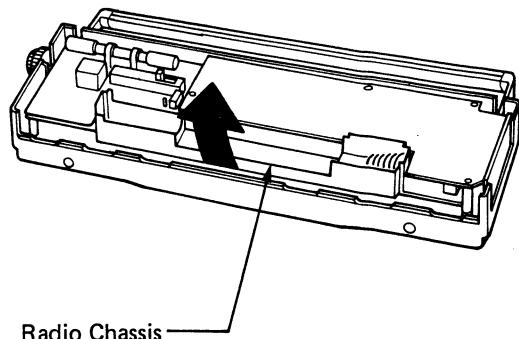


RADIO CHASSIS ASSEMBLY REMOVAL

1. After removing the Cabinet Bottom, pull out the volume control, tone control, balance control, and tuning knobs from the unit.



2. Pull out Connector CN5 from the Amplifier P.C.Board and then, Connector TP6 from the Radio Tuner P.C.Board.
3. Remove the screw (8) fastening the Radio Chassis.
4. Remove the Radio Chassis by lifting it in the direction of the arrow.



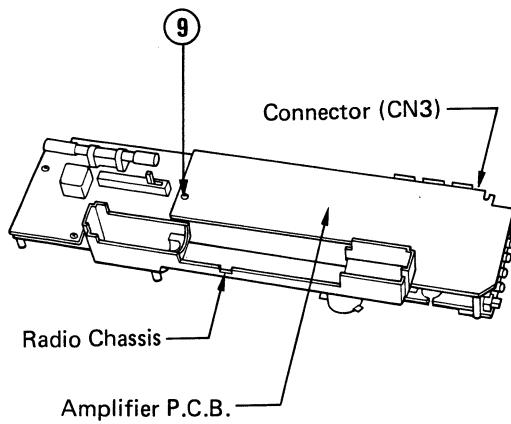
4. Reassemble in reverse order.

5. Reassemble in reverse order.

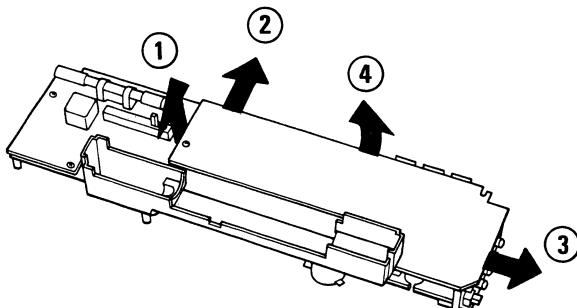
DISASSEMBLY INSTRUCTIONS (Continued)

AMPLIFIER P.C.BOARD ASSEMBLY REMOVAL

1. Follow the instructions for the Cabinet Bottom Assembly Removal.
2. Pull out Connector CN3 from the P.C.Board and remove the leads from the Volume P.C.Board.



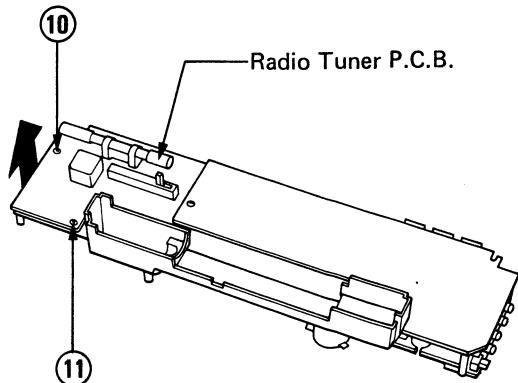
3. Carefully remove the P.C.Board by lifting it in the numerical order as illustrated.



4. Reassemble in reverse order.

RADIO TUNER P.C.BOARD REMOVAL

1. Follow the instructions for the Radio Chassis Assembly Removal.
2. Turn the Tuning Knob fully in an arbitrary direction.
3. Remove the screws (10 and 11) fastening the Radio Tuner P.C.Board. Then, detach the P.C.Board by lifting it in the direction of the arrow.



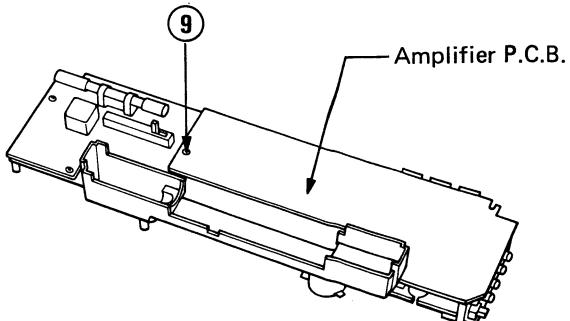
4. Reassemble in reverse order.

NOTE:

Do not turn the Tuning Knob before the Radio Tuner P.C.Board is re-mounted to the unit.
When the Radio Tuner P.C.Board is mounted, insert the shaft of the variable capacitor into the hole on the drum. After that, check to see that correct dial indications are obtained.

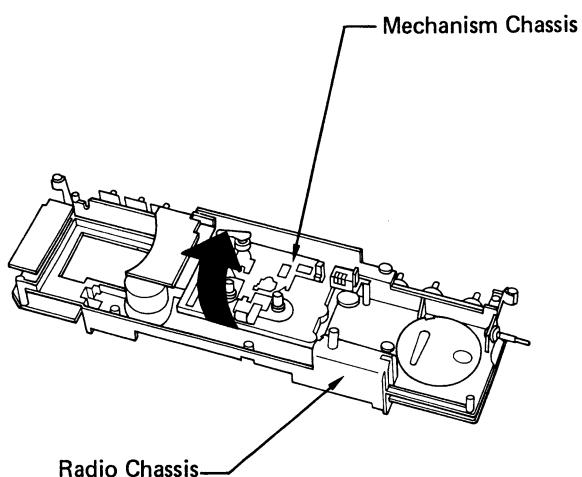
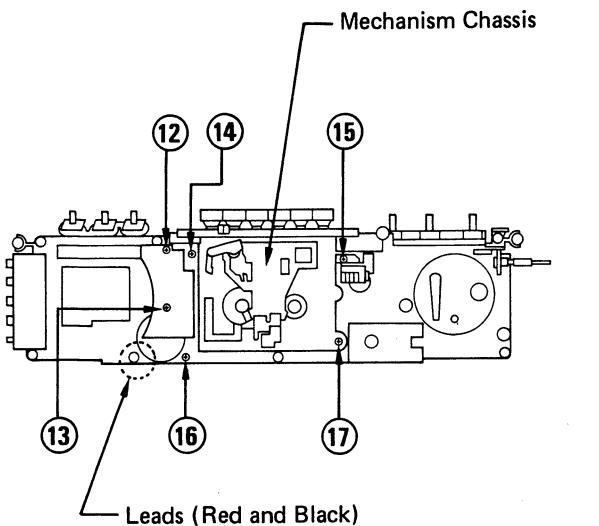
MECHANISM CHASSIS REMOVAL

1. Remove the Radio Chassis from the unit by following its removal instruction and then, a screw (9) fastening the Amplifier P.C.Board.



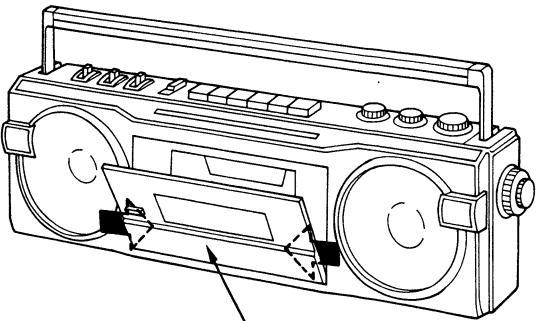
2. Remove the two screws (12 and 13) fastening the AMSS Program P.C.Board and then, the P.C.Board.
3. Remove the four screws (14 – 17) fastening the Chassis and the two screws (Red and Black) running from the motor.
4. Remove the Mechanism Chassis by lifting it in the direction of the arrow. Note the lead connections.
5. Reassemble in reverse order.

DISASSEMBLY INSTRUCTIONS (Continued)



CASSETTE COMPARTMENT LID REMOVAL

1. Open the cassette compartment lid by pressing the STOP/EJECT button.
2. Unlock the compartment latches from the Cabinet Top by pushing the both sides of the compartment lid strong. Then, the lid will be easily removed from the unit.



3. Reassemble in reverse order.

NOTICE ON REASSEMBLY

1. Refer to "Wiring Diagram" for re-wiring.
2. Refer to "Exploded Views" for lead arrangement.
3. Check to see that the lead wires or electrical components do not touch the driving mechanism.

ADJUSTMENTS

GENERAL REMARKS

- Before adjustment, wipe the tape contacting surfaces clean as well as the contacting surfaces of the driving parts with a soft cloth soaked in alcohol. Trouble may occur because of oil and grease stains.
- Carefully handle the belt because grease easily attaches to it.
- Check the rubber-used parts. If the rubber has quality deterioration or scratch marks, replace the part with a new one.

Unless especially specified, set the unit and measuring instruments as follows:

• Tape Select Switch	NORMAL
• Function Switch	TAPE
• Mode Switch	STEREO
• Beat Cancel Switch	3
• Balance Control	Center (click position)
• Tone Control	High
• Volume Control	Arbitrary
• DC Constant-Voltage Regulator Output	9.0V DC

NOTE:

1. Perform each adjustment in the described order.
2. Obtain the output from the line output terminal.
3. Supply 9.0V DC from the constant-voltage regulator to the unit.

EQUIPMENT REQUIRED

- VTVM (2 sets)
- Frequency Counter
- Dummy Load (47k-ohm)
- Dualtrace Synchroscope
- Test Tapes
 - * 3kHz Test Tape (Example: TEAC MTT-111) for Tape Speed Adjustment
 - * 8kHz Test Tape (Example: TEAC MTT-113C) for Head Azimuth Adjustment
- DC Constant-Voltage Regulator
- Alignment Tool

AMSS SOLENOID ADJUSTMENT

AMSS (Automatic Music Select System) detects a silent space (unrecorded portion) between each music on a music tape and automatically plays back a desired music from the start.

NOTE:

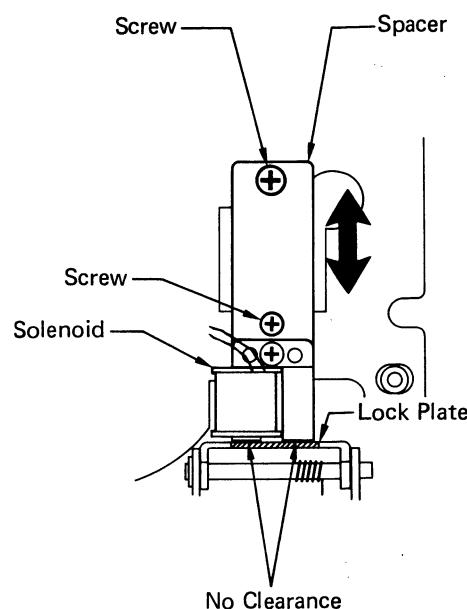
Unrecorded portion should last more than approximately four seconds.

It may not operate correctly in the following cases:

- * When the recorded sound is often interrupted as in a speech tape.
- * When the silent space does not last long enough (less than four seconds).
- * When there is an appreciable noise in the silent space between two adjacent programs.
- * When the unit is placed on a television set, AMSS may not operate correctly due to adverse effect of the TV signal. In this case, put the unit away from the television set.

If AMSS Solenoid is not correctly positioned, AMSS mechanism does not function correctly, F.FWD or Rewind button is released while Automatic Music Select System is working, or a button may not be locked. In this case, perform the adjustment as follows:

1. Remove the Chassis from the unit by following its removal instructions.
2. Loosen the two screws fastening the Spacer of the Solenoid. Then, adjust the Spacer by moving it in the direction of the arrow, so that the Lock Plate is tightly attached to the two absorption surfaces as illustrated.

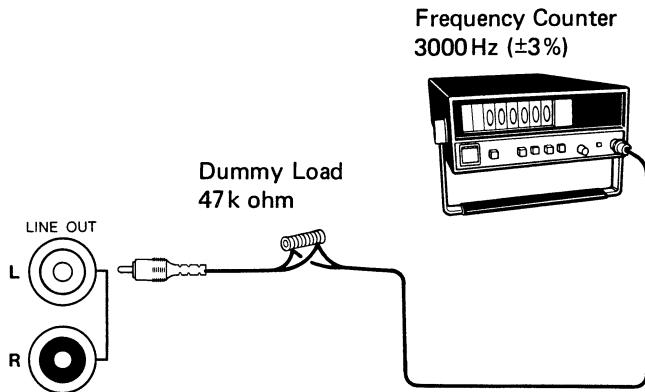


3. After the adjustment, tighten the screws fastening the Spacer. Set the unit in the playback mode and check that AMSS mechanism functions correctly as follows:
 - * Check if F.FWD button can be locked by pressing it.
 - * Check if Rewind button can be locked by pressing it.
4. Readjust the spacer position if either F.FWD or Rewind button cannot be locked or is soon released.
5. After the confirmation, secure the screws fastening the Spacer with paint or glue.

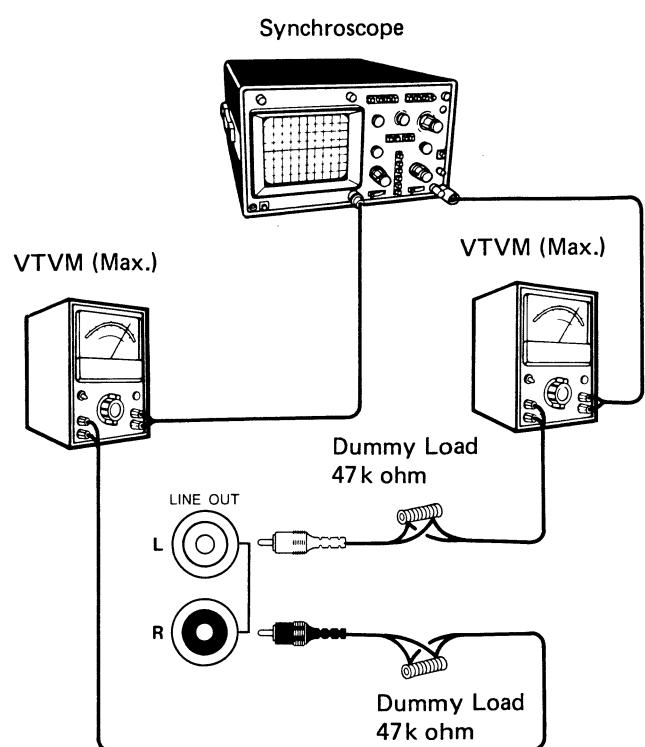
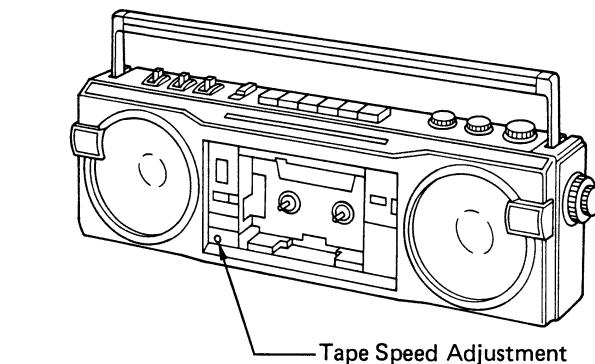
ADJUSTMENTS (Continued)

TAPE SPEED ADJUSTMENT

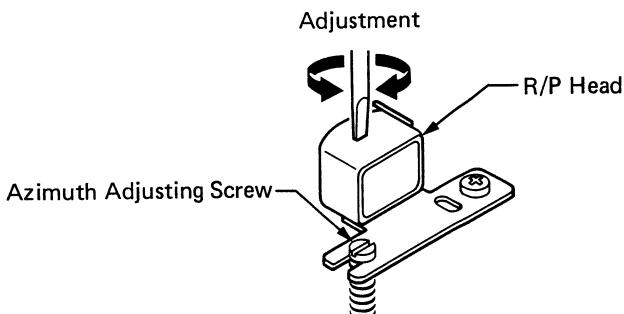
1. Remove the cassette compartment lid and connect a frequency counter to the left or right channel LINE OUT as illustrated. Then, play back a 3kHz test tape (Example: TEAC MTT-111).



2. Adjust the tape speed by turning the potentiometer inside the Motor with an alignment tool until the frequency counter reads 3kHz ($\pm 10\text{Hz}$).



2. Insert a 8kHz test tape (Example: TEAC MTT-113C) into the cassette compartment and play it back.
3. Slowly turn the azimuth adjusting screw until the amplitudes of both channel signal wave forms are at maximum and both wave forms overlap. Set to optimum at maximum reading of the VTVM.

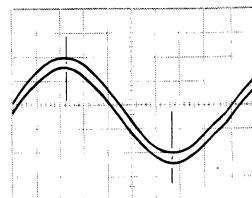


HEAD AZIMUTH ADJUSTMENT

1. Remove the cassette compartment lid and connect a VTVM and a dualtrace synchroscope to both channels LINE OUT as illustrated. Set the synchroscope as follows:

* MODE CHOP
 * SOURCE INT. (CH1 or CH2)
 * SWEEP MODE AUTO (automatic)

4. After the adjustment, secure the azimuth adjusting screw with paint or glue.



TUNER ADJUSTMENT

Measuring Instruments Required

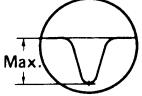
- AM Signal Generator
- FM Standard Signal Generator
- Generator Scope
- Stereo Signal Generator
- Loop Antenna
- Dummy Antenna (75 ohm, unbalanced type)
- VTVM
- Frequency Counter
- Distortion Meter
- Oscilloscope
- Dummy Load (3.2 ohm)
- Alignment Tool

NOTE:

Use an alignment tool with plastic grip for all adjustments.

MW ALIGNMENT

Standard test frequency 400Hz and modulation 30% at AM

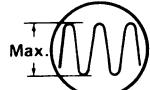
Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustments	Remarks
		INPUT	OUTPUT				
1	Calibration of IF for AM	Connect standard loop antenna to output terminal of gene-scope. Place bar antenna 60 cm away from loop antenna.	Connect input terminal of gene-scope to detector output. (CN1-2 and CN1-1 or CN1-3)	455kHz	Low End	T3, T4 and T5	Obtain symmetrical curve and maximum amplitude. 
2	Calibration of Tuning Range			510kHz		T9	
3				1,670kHz	High End	TC5	
4	Adjustment of Tracking	Connect standard loop antenna to output of AM signal generator. Place bar antenna 60 cm away from loop antenna.	Connect VTVM with 3.2ohm dummy load and oscilloscope to Phones/Ext. Speaker terminal.	600kHz	600kHz	L4 (bar ant. coil)	
5				1,400kHz	1,400kHz	TC2	
6	Repeat the above steps until no further change is noted in any of the adjustment.						

SW1 ALIGNMENT

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustments	Remarks
		INPUT	OUTPUT				
1	Calibration of Tuning Range	Connect standard loop antenna to output of AM signal generator.	Connect VTVM with 3.2ohm dummy load and oscilloscope to Phones/Ext. Speaker terminal.	2.2MHz	Low End	T8	
2		Place bar antenna 60cm away from loop antenna.		7.5MHz	High End	TC4	
3	Adjustment of Tracking			2.5MHz	2.5MHz	L4-3 (bar ant. coil)	
4				6.5MHz	6.5MHz	TC3 (PVC)	
5	Repeat the above steps until no further change is noted in any of the adjustment.						

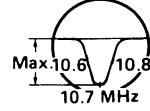
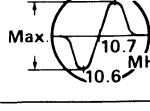
TUNER ADJUSTMENT (Continued)

SW2 ALIGNMENT

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustments	Remarks
		INPUT	OUTPUT				
1	Calibration of Tuning Range	Connect AM signal generator to antenna terminals (TP1 or TP2) through dummy antenna (30 ohm/10 pF).	Connect VTVM with 3.2 ohm dummy load and oscilloscope to Phones/Ext. Speaker terminal.	7.2MHz	Low End	T7	Obtain sine-wave of 400Hz and maximum amplitude. 
2				23.7MHz	High End	TC3	
3				8.5MHz	8.5MHz	T6	
4				21MHz	21MHz	TC1	
5	Repeat the above steps until no further change is noted in any of the adjustment.						

FM ALIGNMENT

Standard test frequency 400Hz and deviation 22.5kHz

Step	Alignment	Connections		Frequency of Signal Generator	Tuning Dial Setting	Adjustments	Remarks	
		INPUT	OUTPUT					
1	Calibration of IF	Connect output terminal of gene-scope to pin 3 of IC1 through capacitor (10pF)	Connect input terminal of gene-scope to detector output. (CN1-2 and CN1-1 or CN1-3)	10.7MHz	Low End	Turn T2 (blue core) fully counter-clockwise. T1	Obtain symmetrical curve and maximum amplitude. 	
2						T2 (blue core)		
3	Calibration of Tuning Range	Connect FM signal generator to antenna terminals (TP1 and TP2) through dummy antenna. (75 ohm, unbalanced Type).	Connect VTVM with 3.2 ohm dummy load and oscilloscope to Phones/Ext. Speaker terminal.	87.2MHz	L2	Obtain sine-curve and maximum amplitude. 		
4				109MHz		TC2 (PVC)		
5	Adjustment of Tracking			90MHz	90MHz	L1		
6				106MHz	106MHz	TC1 (PVC)		
7	Repeat the above steps until no further change is noted in any of the adjustment.							

FM MULTIPLEX ADJUSTMENT

Prior to the adjustment, set the unit as follows:

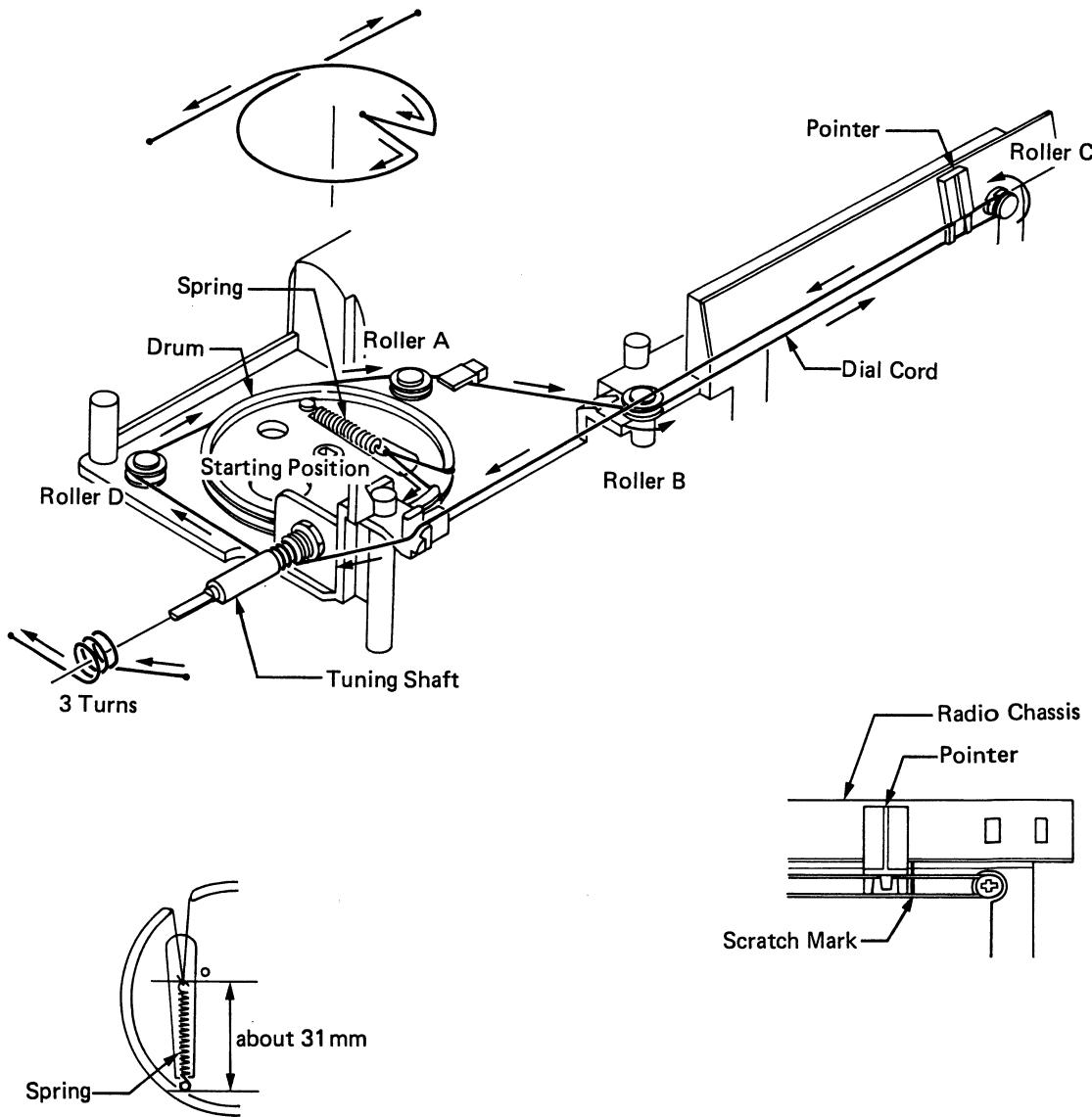
- Function Switch RADIO (ON)
- Band Select Switch FM
- Mode Switch STEREO
- Balance Control Center (click position)
- Tone Control Maximum
- Volume Control Center

38kHz (V.C.O.) ADJUSTMENT

1. Connect the frequency counter to the sixteenth pin (TP7) in IC3 and a resistor (330 k-ohm) as illustrated.
2. Adjust the potentiometer (P1) until the oscillation frequency of IC3 becomes 38kHz (± 20 Hz).

DIAL CORD STRINGING

1. Mount the Radio Tuner P.C.Board on the Radio Chassis and then, the Drum to the shaft of the variable capacitor.
2. Tie the dial cord of length 1,070mm (effective length: 950mm) and diameter $\phi 5$ to the spring and hook the spring to the illustrated position of the drum.
3. Engage the dial cord as illustrated in the following order. Drum \Rightarrow Pulley A \Rightarrow Pulley B \Rightarrow Pulley C \Rightarrow Tuning Shaft (3 turns) \Rightarrow Pulley D \Rightarrow Drum \Rightarrow Spring
4. Hook the dial cord to the spring and tie the cord where the spring tip extends until the spring length becomes approximately 31mm.
5. Secure the place where the spring is hooked to the drum and the knot in the dial cord with paint or glue.
6. Turn the Tuning Shaft counterclockwise until it stops and set the left edge of the pointer to the mark on the Radio Chassis as illustrated. Then, fix the pointer there.
7. Apply white lacquer to the pointer to secure.



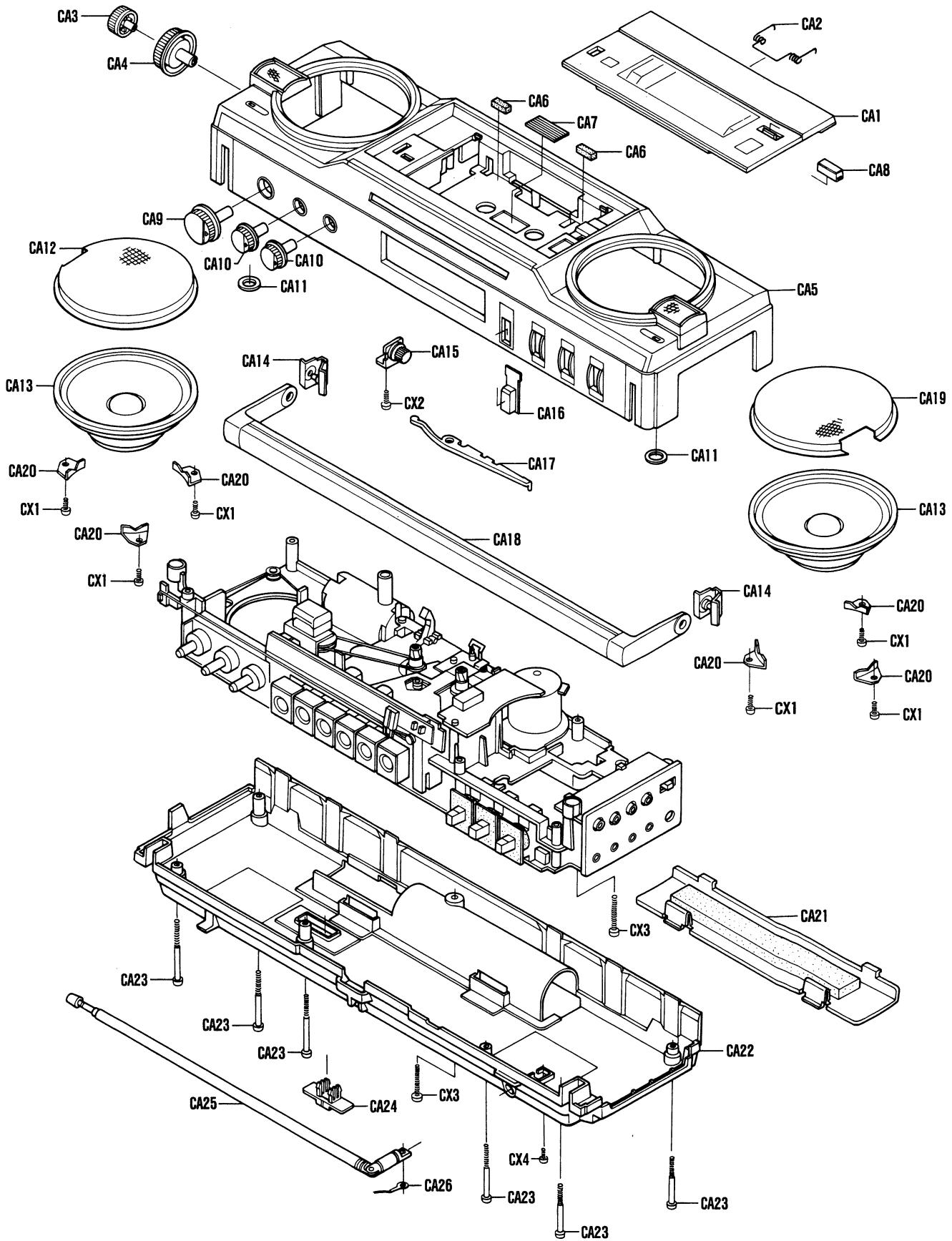
PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
PACKAGE							
141 2 1719 20300	Handle		1	DC1	141 2 8119 09701	Counter	1
141 6 1419 65001	Individual Carton (White)		1	DC2	141 2 5649 11700	Counter Belt	1
141 6 1419 65004	Individual Carton (Blue)		1	DC3	141 2 8139 09500	Counter Bracket	1
141 6 1449 82300	Styrofoam Case, Left		1	DC4	141 2 8519 29400	Spring, Stop Lever	1
141 6 1449 82400	Styrofoam Case, Right		1	DC5	141 2 3519 57700	Bracket Eject Arm	1
141 6 2519 10021	Poly Cover 100 x 210		1	DC6	141 2 4729 04000	Lug	1
141 6 2519 15290	Poly Cover		1	DC7	141 2 2449 45400	Sheet	1
141 6 2519 23033	Poly Cover 230 x 330		1	DC8	4 1329 78400	AMSS Program P.C.B. Assy [See PCB3]	1
141 6 3119 19300	Reinforce Handle		1	DC9	141 2 8519 78000	Spring, Stop	1
141 6 4559 00100	Serial No. Sheet		2	DC10	141 2 5389 03400	Drum	1
ACCESSORIES							
4 1919 71480	AC Adaptor		1	DC11	4 2249 70300	Fine Tuner [FT1]	1
4 2369 72251	Adaptor Plug Assy		1	DC12	4 1329 78420	Jack P.C.B. Assy [See PCB6]	1
4 2419 72492	Cassette		1	DC13	141 2 3679 31501	Jack Plate (White)	1
141 6 4729 01900	Caution Label		1	DC13	141 2 3679 31506	Jack Plate (Blue)	1
141 6 4729 32400	POP Label		1	DC14	4 1539 70661	Microphone [BM1 & BM2]	2
142 6 4119 31632	Instruction Manual		1	DC15	141 2 4219 14000	Screw	4
CABINET							
CN3	4 2359 70990	RT Pin Socket	2	DC16	141 2 5519 03300	Dial Roller A	3
CN5	4 2359 75727	Connector 4P Assy	1	DC17	141 2 3119 18100	Radio Chassis	1
CA1	4 2359 75758	Connector 3P Assy	1	DC18	141 2 1449 52900	Dial Plate (White)	1
CA1	141 0 1249 23201	Cassette Lid Assy (White)	1	DC18	141 2 1449 52902	Dial Plate (Blue)	1
CA1	141 0 1249 23204	Cassette Lid Assy (Blue)	1	DC19	141 2 8259 04700	Dial Roller	1
CA2	141 2 8529 06200	Spring, Cassette Lid	1	DC20	4 1329 78530	Volume P.C.B. Assy [See PCB5]	1
CA3	141 2 1639 44300	Fine Tuning Knob	1	DC21	141 2 3829 18000	Spring, Terminal	1
CA4	141 2 1639 44200	Tuning Knob	1	DC22	141 2 5119 08100	Pointer	1
CA5	141 0 1119 88801	Cabinet Top Completed (Speaker (300Ω) [SP102 & SP202] is Included) (White)	1	DC23	4 1329 78410	LED Indicator P.C.B. Assy [See PCB4]	1
CA5	141 0 1119 88804	Cabinet Top Completed (Speaker (300Ω) [SP102 & SP202] is Included) (Blue)	1	DC24	141 2 3829 06700	Terminal Battery Anode	1
CA6	141 2 4469 36500	Cushion	2	DC25	141 2 3829 20800	Spring, Battery	1
CA7	141 2 1519 24700	Reflector	1	DC26	4 1259 71870	Radio Tuner P.C.B. Assy [See PCB2]	1
CA8	141 2 1659 09300	AMSS Button	1	DC27	4 1329 78391	Amplifier P.C.B. Assy [See PCB1]	1
CA9	141 2 1639 51100	Volume Knob	1	DC28	141 2 4469 42500	Cushion, Screen Switch	1
CA10	141 2 1639 51000	Tone Knob	2	DC29	141 2 2449 45100	Screen Switch	1
CA11	141 2 4469 31700	Cushion, Mike	2	DC30	141 2 1629 06800	Function Knob	3
CA12	141 2 1149 29200	Screen, Speaker (Right)	1	DY1	102 3 1302 61411	Screw, Pan Hd. Tapping-1	+M2.6x14
CA13	4 1519 71084	Speaker (3.2Ω) [SP101 & SP201]	2	DY2	101 3 1302 00311	Screw, Pan Hd.	+M2.0x3
CA14	141 2 2719 18500	Handle Holder	2	DY3	102 3 1302 60811	Screw, Pan Hd. Tapping-1	+M2.6x8
CA15	141 0 5519 08500	Eject Gear Assy	1	DY4	102 3 1302 60818	Screw, Pan Hd. Tapping-1	+M2.6x8
CA16	141 2 1659 09400	Rec. Mute Knob	1	DY5	102 3 1302 61011	Screw, Pan Hd. Tapping-1	+M2.6x10
CA17	141 2 7419 77200	Cassette Lid Lock	1	DY6	102 3 1703 00811	Screw, Bind Hd. Tapping-1	+M3.0x8
CA18	141 0 1719 10400	Handle Assy (White)	1				
CA18	141 0 1719 10403	Handle Assy (Blue)	1				
CA19	141 2 1149 29201	Screen, Speaker (Left)	1				
CA20	141 2 3729 00801	Fix Speaker Bracket	6				
CA21	141 0 1339 09703	Battery Lid Assy (White)	1				
CA21	141 0 1339 09706	Battery Lid Assy (Blue)	1				
CA22	141 2 1119 84801	Cabinet Bottom (White)	1				
CA22	141 2 1119 84804	Cabinet Bottom (Blue)	1				
CA23	141 2 4219 09800	Screw	6				
CA24	141 2 1649 12900	Band Select Knob	1				
CA25	4 2449 70330	Antenna Rod	1				
CA26	141 2 4729 03001	Lug	1				
CX1	102 3 1303 01011	Screw, Pan Hd. Tapping-1	+M3.0x10				
CX2	102 3 1302 60811	Screw, Pan Hd. Tapping-1	+M2.6x8				
CX3	143 3 1303 03018	Screw, Pan Hd. Tapping-B	+M3.0x30				
CX4	101 3 1302 60614	Screw, Pan Hd. (White)	+M2.6x6				
CX4	101 3 1302 60618	Screw, Pan Hd. (Blue)	+M2.6x6				

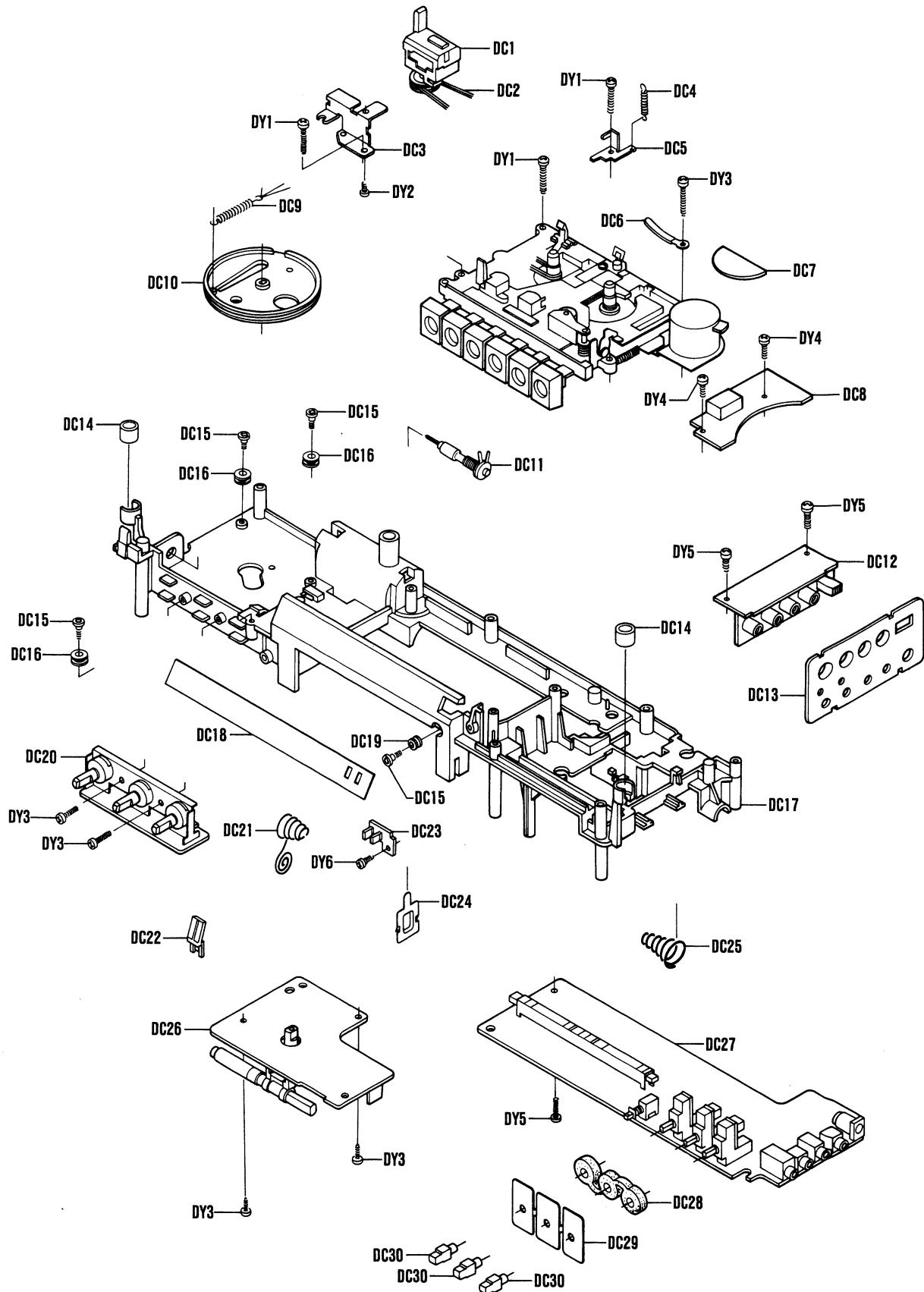
NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

CABINET EXPLODED VIEW



RADIO CHASSIS EXPLODED VIEW



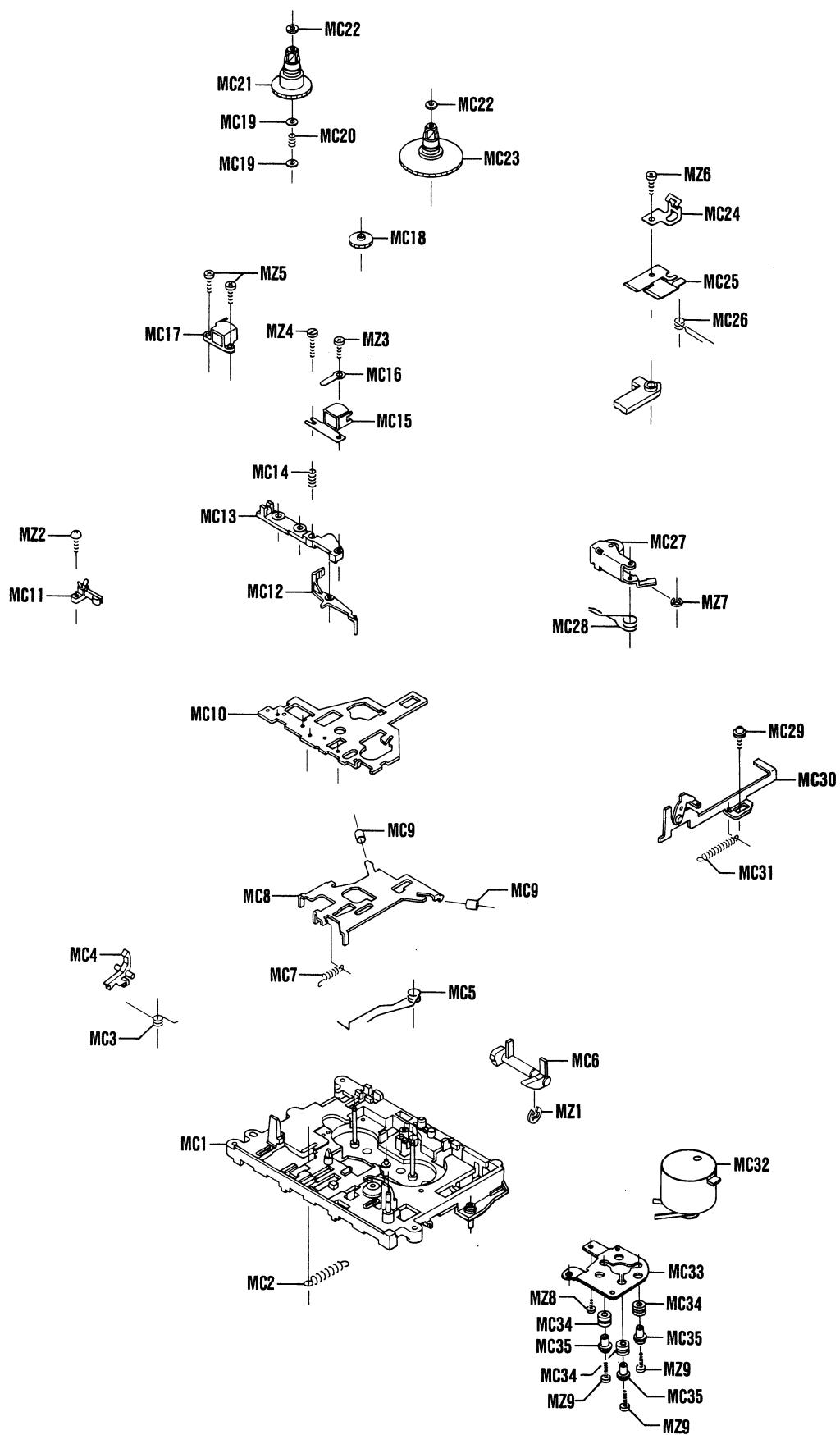
MECHANISM PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
MECHANISM							
MC1	141 0 3119 19902	Chassis Assy	1	MC64	141 2 8529 05400	Spring, Rod	1
MC2	141 2 8549 10700	Spring, Slide Base	1	MC65	141 2 8529 05401	Spring, Pause Rod	1
MC3	141 2 8519 97300	Spring, Interlock	1	MC66	141 2 8529 05600	Spring, Record Stopper	1
MC4	141 2 8419 10400	Interlock Lever	1	MC67	141 2 7419 75800	Pause Lock Lever	1
MC5	141 2 8529 07300	Spring, Idler Arm	1	MC68	141 2 8529 05700	Spring, Pause Lock	1
MC6	141 2 7419 74900	Cassette-up Lever	1	MC69	141 2 4539 15800	Washer	2
MC7	141 2 8549 08700	Spring, Brake	1	MC70	141 2 5519 36600	Capstan Gear	1
MC8	141 2 7149 05200	Brake Arm	1	MC71	141 2 8519 98200	Spring, Flywheel	1
MC9	141 2 4459 25200	Brake Cover	2	MC72	141 0 5219 07201	Flywheel Assy	1
MC10	141 2 7319 43202	Slide Base	1	MC73	141 2 5649 20900	Capstan Belt	1
MC11	4 2319 72121	Leaf Switch (Power) [S11]	1	MC74	141 0 3519 20100	Flywheel Support Assy	1
MC12	141 2 7419 68800	Sensor Lever	1	MC75	141 2 8529 07200	Spring, Ground	1
MC13	141 2 3529 29400	Spacer, Head	1	MC76	141 2 4729 00200	Lug	1
MC14	141 2 8519 47400	Spring, Head	1	MC77	4 2649 70344	Solenoid [SL1]	1
MC15	4 2429 72190	R/P Head [HD1]	1	MC78	141 2 3769 12100	Spacer Solenoid	1
MC16	141 2 4729 01900	Lug	1	MC79	4 2319 74990	Leaf Switch (AMSS Switch B) [S10]	1
MC17	4 2429 72200	Erase Head [HD2]	1	MC80	4 2319 72570	Leaf Switch (AMSS Switch A) [S9]	1
MC18	141 2 5519 36400	F.FWD Gear	1	MC81	141 2 4539 12100	Washer Spindle	2
MC19	141 2 4539 09400	Washer	3	MC82	141 2 5519 36701	Idler Pulley Gear	1
MC20	141 2 8559 01800	Spring, Supply	1	MC83	141 0 7439 10400	Idler Arm Assy	1
MC21	141 0 5319 05400	Supply Reel Assy	1	MC84	141 2 8259 09100	Roller	1
MC22	141 2 4539 15700	Washer	2	MZ1	112 3 1304 00082	E Ring	M4.0
MC23	141 0 5319 05301	Take-up Reel Assy	1	MZ2	103 3 1302 00811	Screw, Pan Hd. Tapping-2	+M2.0x8
MC24	141 2 8539 45200	Spring, Cassette	1	MZ3	101 3 1702 00611	Screw, Bind Hd.	+M2.0x6
MC25	141 2 8539 41102	Spring, Cassette	1	MZ4	101 3 2502 00611	Screw, Cylinder Hd.	-M2.0x6
MC26	141 2 8519 96901	Spring, Cassette-up	1	MZ5	101 3 1702 00811	Screw, Bind Hd.	+M2.0x8
MC27	141 0 5419 03200	Pinch Roller Assy	1	MZ6	143 3 1702 60811	Screw, Bind Hd. Tapping-B	+M2.6x8
MC28	141 2 8519 97200	Spring, Pinch Roller	1	MZ7	112 3 1302 00082	E Ring	M2.0
MC29	141 2 4219 13201	Screw w/Washer	1	MZ8	102 3 1302 60811	Screw, Pan Hd. Tapping-1	+M2.6x8
MC30	141 0 7319 24201	Eject Plate Assy	1	MZ9	101 3 1302 60811	Screw, Pan Hd.	+M2.6x8
MC31	141 2 8519 38700	Spring, Head Lever	1	MZ10	112 3 1706 30040	Grip Ring	M6.3
MC32	4 5279 71173	Motor [M1]	1	MZ11	102 3 1302 00611	Screw, Pan Hd. Tapping-1	+M2.0x6
MC33	141 2 3789 08700	Bracket, Motor	1	MZ12	112 3 1301 20082	E Ring	M1.2
MC34	141 2 4459 11800	Cushion, Motor	3	MZ13	101 3 1302 00811	Screw, Pan Hd.	+M2.0x8
MC35	141 2 3529 19900	Spacer, Motor	3	MZ14	101 3 1302 00411	Screw, Pan Hd.	+M2.0x4
MC36	141 2 8429 06100	Record Switch Lever	1	MZ15	101 3 1702 00411	Screw, Bind Hd.	+M2.0x4
MC37	141 2 8519 78000	Spring, Stop	1				
MC38	141 2 4539 17200	Washer	1				
MC39	141 2 7319 49300	Lock Plate	1				
MC40	141 2 5519 36500	Take-up Gear	1				
MC41	141 0 7439 09200	Take-up Arm Assy	1				
MC42	141 2 8519 33000	Spring, Index Lock Lever	1				
MC43	141 2 7419 75500	Shut-off Lever	1				
MC44	141 2 7439 26200	Record Stopper Lever	1				
MC45	141 2 1619 91300	Record Button	1				
MC46	141 2 7319 50000	Record Rod	1				
MC47	141 2 1619 91200	Play Button	1				
MC48	141 2 7319 49900	Play Rod	1				
MC49	141 2 1619 91100	Select Button	3				
MC50	141 2 7319 49800	Rewind Rod	1				
MC51	141 2 7319 49700	F.FWD Rod	1				
MC52	141 0 7319 25200	Pause Rod Assy	1				
MC53	141 2 4219 12100	Screw w/Washer	1				
MC54	141 2 1619 91400	Stop Button	1				
MC55	141 2 7319 49500	Stop Eject Rod	1				
MC56	141 2 8529 05800	Lock Spring, Lever	1				
MC57	141 2 7419 76500	Lock Lever	1				
MC58	141 2 7519 55300	Spindle Lock Lever	1				
MC59	141 2 3519 57100	Bracket Plate	1				
MC60	141 2 8549 10600	Spring, Play Rod	1				
MC61	141 2 8549 10800	Spring, Sensor	1				
MC62	141 2 8519 25400	Spring, Click	1				
MC63	141 2 8529 05500	Spring, Rod	1				

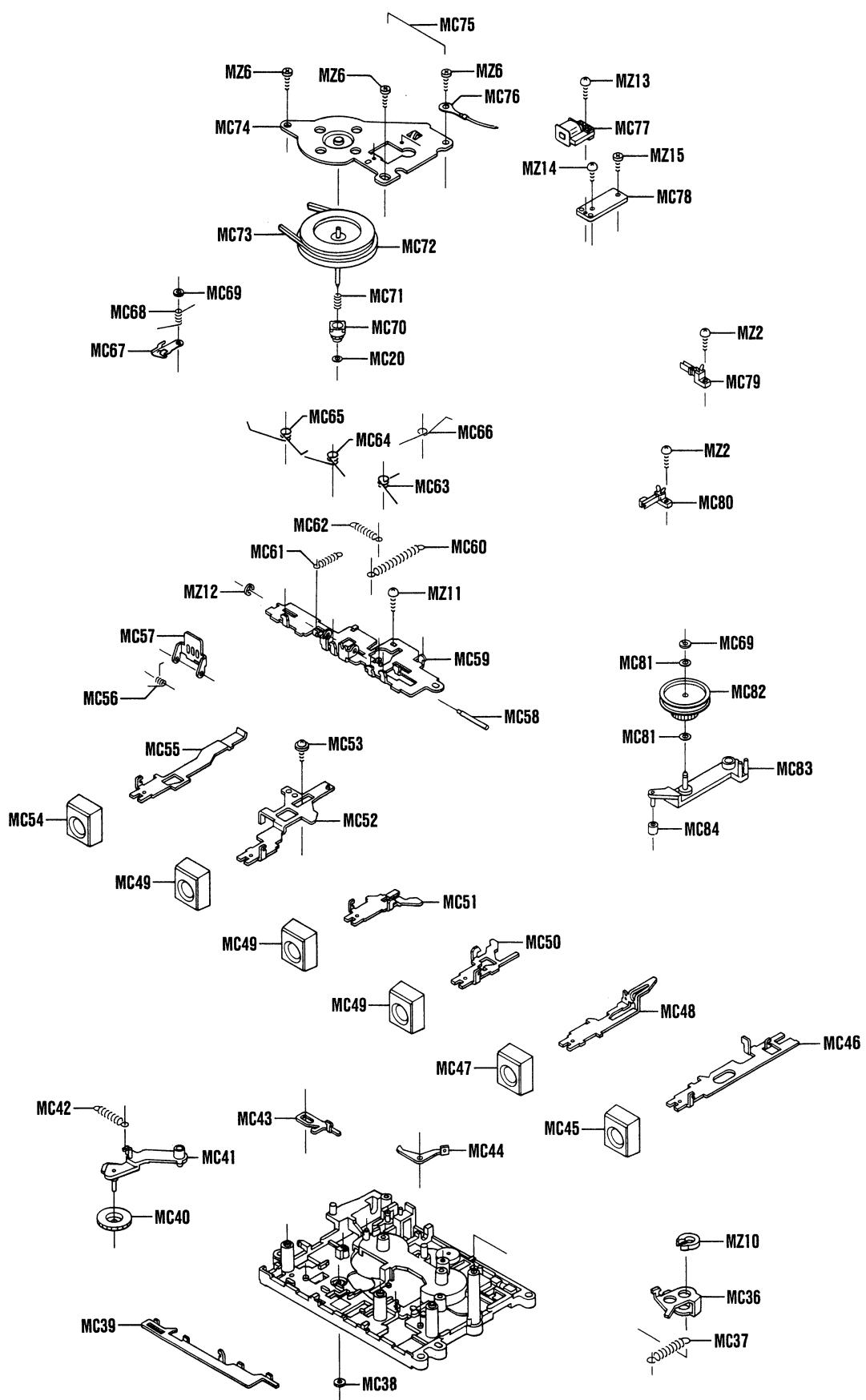
NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

MECHANISM EXPLODED VIEW



MECHANISM EXPLODED VIEW (Continued)



P.C.BOARD PARTS LIST

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty
		AMPLIFIER P.C.B. ASSY					
PCB1	4 1329 78391	Amplifier P.C.B. Assy	1	C123	CD4 7 6100 0001V	Electrolytic	47μF 10V
	141 2 3689 08400	Radiator IC (for IC [302])	1	C124	4 2239 70650	Capacitor	2200μF 10V
CN1	4 2359 75669	Connector 5P Assy	1	C125	CM1 5 4500 K00SV	Mylar	0.15μF 50V ±10%
CN2	4 2369 73380	Connector 5P	1	C126	CC3 3 1500 KE00C	Ceramic	330pF 50V ±10%
CN3	4 2369 73370	Connector 4P	1	C127	CC2 2 0500 KD00C	Ceramic	22pF 50V ±10%
CN5	4 2369 73360	Connector 3P	1	C128	CC1 8 1500 KE00C	Ceramic	180pF 50V ±10%
S2	4 2319 75700	Slide Switch (Record/Play)	1	C129	CC2 2 1500 KE00C	Ceramic	220pF 50V ±10%
S3	4 2319 75710	Push Switch (Rec. Mute)	1	C201	CD1 0 4500 0002V	Electrolytic	0.1μF 50V
S4	4 2319 75341	Lever Switch (Tape Select)	1	C202	CC4 7 2500 KE00C	Ceramic	0.0047μF 50V ±10%
S5	4 2319 75341	Lever Switch (Function)	1	C203	CC1 8 1500 JD00C	Ceramic	180pF 50V ±5%
S6	4 2319 72462	Lever Switch (Mode)	1	C204	CC3 3 2500 KE00C	Ceramic	0.0033μF 50V ±10%
J1	4 2359 71780	Jack 1P (Mike, Left)	1	C205	CC3 3 1500 KE00C	Ceramic	330pF 50V ±10%
J2	4 2359 73470	1P Jack (Mike, Right)	1	C206	CC3 3 1500 KE00C	Ceramic	330pF 50V ±10%
J3	4 2359 75701	Jack 5P With Switch (Headphones)	1	C207	CC1 0 2500 KE00C	Ceramic	0.001μF 50V ±10%
J4	4 2359 75800	Jack 5P (Phones/Ext. Speaker)	1	C208	CD1 0 7100 0001V	Electrolytic	100μF 10V
J5	4 2359 72954	Ext. Power Socket	1	C209	CC1 0 2500 KE00C	Ceramic	0.001μF 50V ±10%
L101	4 2729 70480	Coil (33mH)	1	C210	CD1 0 6160 0000V	Electrolytic	10μF 16V
L201	4 2729 70480	Coil (33mH)	1	C211	CD1 0 4500 0002V	Electrolytic	0.1μF 50V
L301	4 2539 70301	Micro Inductor (100μH)	1	C212	CM3 3 3500 K00SV	Mylar	0.033μF 50V ±10%
L302	4 2539 70301	Micro Inductor (100μH)	1	C213	CD1 0 5500 0000V	Electrolytic	1μF 50V
L303	4 2532 00470	Choke Coil (470μH)	1	C214	CC4 7 1500 KE00C	Ceramic	470pF 50V ±10%
D101	4 2029 71440	Diode, 1SS95	1	C215	CD1 0 5500 0000V	Electrolytic	1μF 50V
D102	4 2029 71440	Diode, 1SS95	1	C216	CC1 0 2500 KE00C	Ceramic	0.001μF 50V ±10%
D103	4 2029 71440	Diode, 1SS95	1	C217	C18 2 3250 KF00C	Boundary	0.082μF 25V ±10%
D104	4 2029 71440	Diode, 1SS95	1	C221	CC1 0 2500 KE00C	Ceramic	0.001μF 50V ±10%
D201	4 2029 71440	Diode, 1SS95	1	C222	CD4 7 6100 0001V	Electrolytic	47μF 10V
D202	4 2029 71440	Diode, 1SS95	1	C223	CD4 7 6100 0001V	Electrolytic	47μF 10V
D203	4 2029 71440	Diode, 1SS95	1	C224	4 2239 70650	Capacitor	2200μF 10V
D204	4 2029 71440	Diode, 1SS95	1	C225	CM1 5 4500 K00SV	Mylar	0.15μF 50V ±10%
D301	202 5 2470 13540	Diode, DS135	1	C226	CC3 3 1500 KE00C	Ceramic	330pF 50V ±10%
D302	4 2029 72210	Diode, MTZ6.8A	1	C227	CC2 2 0500 KD00C	Ceramic	22pF 50V ±10%
D303	202 5 9110 18820	Diode, 1S 188	1	C228	CC1 8 1500 KE00C	Ceramic	180pF 50V ±10%
Q101	203 5 5000 53664	Transistor, 2SC 536	1	C229	CC2 2 1500 KE00C	Ceramic	220pF 50V ±10%
Q201	203 5 5000 53664	Transistor, 2SC 536	1	C301	CD4 7 6100 0001V	Electrolytic	47μF 10V
Q301	203 5 5000 53664	Transistor, 2SC 536	1	C302	CD3 3 5500 0000V	Electrolytic	3.3μF 50V
Q302	203 5 4570 73460	Transistor, 2SD 734	1	C303	CD2 2 7100 0001V	Electrolytic	220μF 10V
Q303	203 5 5000 53654	Transistor, 2SC 536	1	C304	CD4 7 4500 0000V	Electrolytic	0.47μF 50V
Q304	203 5 4570 73460	Transistor, 2SD 734	1	C305	CC4 7 1500 KE00C	Ceramic	470pF 50V ±10%
Q305	203 5 5000 53664	Transistor, 2SC 536	1	C306	CD1 0 5500 0000V	Electrolytic	1μF 50V
Q306	203 5 5000 53664	Transistor, 2SC 536	1	C307	CD2 2 7100 0001V	Electrolytic	220μF 10V
Q307	203 5 5000 53664	Transistor, 2SC 536	1	C308	CD1 0 7100 0001V	Electrolytic	100μF 10V
Q308	203 5 5000 53664	Transistor, 2SC 536	1	C309	CD1 0 7160 0001V	Electrolytic	100μF 16V
IC301	4 2069 71710	IC, M51544L	1	C310	CD1 0 8160 0001V	Electrolytic	1000μF 16V
IC302	206 5 1384 19210	IC, LA4192	1	C311	CD4 7 7100 0001V	Electrolytic	470μF 10V
C101	CD1 0 4500 0002V	Electrolytic	0.1μF 50V	C312	CD2 2 7100 0001V	Electrolytic	220μF 10V
C102	CC4 7 2500 KE00C	Ceramic	0.0047μF 50V ±10%	C313	CD1 0 7100 0001V	Electrolytic	100μF 10V
C103	CC1 8 1500 JD00C	Ceramic	180pF 50V ±5%	C314	CD1 0 5500 0000V	Electrolytic	1μF 50V
C104	CC3 3 2500 KE00C	Ceramic	0.0033μF 50V ±10%	C315	CC4 7 0500 KD00C	Ceramic	47pF 50V ±10%
C105	CC3 3 1500 KE00C	Ceramic	330pF 50V ±10%	C316	CD2 2 4500 0002V	Electrolytic	0.22μF 50V
C106	CC3 3 1500 KE00C	Ceramic	330pF 50V ±10%	C317	CD2 2 4500 0002V	Electrolytic	0.22μF 50V
C107	CC1 0 2500 KE00C	Ceramic	0.001μF 50V ±10%	C318	CD1 0 6160 0000V	Electrolytic	10μF 16V
C108	CD1 0 7100 0001V	Electrolytic	100μF 10V	C319	CD1 0 5500 0000V	Electrolytic	1μF 50V
C109	CC1 0 2500 KE00C	Ceramic	0.001μF 50V ±10%	C320	CD1 0 6160 0000V	Electrolytic	10μF 16V
C110	CD1 0 6160 0000V	Electrolytic	10μF 16V	C321	CC2 7 1500 KE00C	Ceramic	270pF 50V ±10%
C111	CD1 0 4500 0002V	Electrolytic	0.1μF 50V	C322	CM1 0 3500 K00SV	Mylar	0.01μF 50V ±10%
C112	CM3 3 3500 K00SV	Mylar	0.033μF 50V ±10%	X C323	CP1 0 3101 G000V	Polypropylene	0.01μF 100V ±2%
C113	CD1 0 5500 0000V	Electrolytic	1μF 50V	C324	CM1 0 4500 J00SV	Mylar	0.1μF 50V ±5%
C114	CC4 7 1500 KE00C	Ceramic	470pF 50V ±10%	C325	CD1 0 6160 0000V	Electrolytic	10μF 16V
C115	CD1 0 5500 0000V	Electrolytic	1μF 50V	C326	CD1 0 6160 0000V	Electrolytic	10μF 16V
C116	CC1 0 2500 KE00C	Ceramic	0.001μF 50V ±10%	C327	CC3 9 1500 KE00C	Ceramic	390pF 50V ±10%
C117	C18 2 3250 KF00C	Boundary	0.082μF 25V ±10%	C328	CD3 3 5500 0000V	Electrolytic	3.3μF 50V
C121	CC1 0 2500 KE00C	Ceramic	0.001μF 50V ±10%	C332	CC1 0 1500 KD00C	Ceramic	100pF 50V ±10%
C122	CD4 7 6100 0001V	Electrolytic	47μF 10V	R101	RP1 0 2121 JH000	Pretty Carbon	1kΩ 1/8W ±5%
				R102	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ 1/8W ±5%

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty				
R103	RP3 3 2121 JH000	Pretty Carbon	3.3kΩ	1/8W ±5%	1	R301	RP1 0 1121 JH000	Pretty Carbon	100Ω	1/8W ±5%	1
R104	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ	1/8W ±5%	1	R302	RD1 0 1251 JM000	Carbon	100Ω	1/4W ±5%	1
R105	RP1 0 0121 JH000	Pretty Carbon	10Ω	1/8W ±5%	1	R303	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ	1/8W ±5%	1
R106	RD8 2 3251 JM000	Carbon	82kΩ	1/4W ±5%	1	R304	RD1 0 2251 JM000	Carbon	1kΩ	1/4W ±5%	1
R107	RD6 8 3251 JM000	Carbon	68kΩ	1/4W ±5%	1	R305	RP4 7 4121 JH000	Pretty Carbon	470kΩ	1/8W ±5%	1
R108	RP7 5 2121 JH000	Pretty Carbon	7.5kΩ	1/8W ±5%	1	R306	RP3 3 2121 JH000	Pretty Carbon	3.3kΩ	1/8W ±5%	1
R109	RP2 7 3121 JH000	Pretty Carbon	27kΩ	1/8W ±5%	1	R307	RP6 8 0121 JH000	Pretty Carbon	68Ω	1/8W ±5%	1
R110	RP2 7 3121 JH000	Pretty Carbon	27kΩ	1/8W ±5%	1	R308	RP6 8 2121 JH000	Pretty Carbon	6.8kΩ	1/8W ±5%	1
R111	RP1 5 2121 JH000	Pretty Carbon	1.5kΩ	1/8W ±5%	1	R309	RP1 0 2121 JH000	Pretty Carbon	1kΩ	1/8W ±5%	1
R112	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ	1/8W ±5%	1	R310	RP5 6 A121 JH000	Pretty Carbon	5.6Ω	1/8W ±5%	1
R113	RP2 2 3121 JH000	Pretty Carbon	22kΩ	1/8W ±5%	1	R311	RP2 2 1121 JH000	Pretty Carbon	220Ω	1/8W ±5%	1
R114	RP8 2 2121 JH000	Pretty Carbon	8.2kΩ	1/8W ±5%	1	R312	RP1 0 1121 JH000	Pretty Carbon	100Ω	1/8W ±5%	1
R115	RP6 8 4121 JH000	Pretty Carbon	680kΩ	1/8W ±5%	1	R313	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ	1/8W ±5%	1
R116	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ	1/8W ±5%	1	R314	RP3 3 4121 JH000	Pretty Carbon	330kΩ	1/8W ±5%	1
R117	RP1 0 4121 JH000	Pretty Carbon	100kΩ	1/8W ±5%	1	R315	RP1 0 1121 JH000	Pretty Carbon	100Ω	1/8W ±5%	1
R118	RP1 0 2121 JH000	Pretty Carbon	1kΩ	1/8W ±5%	1	R316	RP1 5 4121 JH000	Pretty Carbon	150kΩ	1/8W ±5%	1
R119	RP1 8 4121 JH000	Pretty Carbon	180kΩ	1/8W ±5%	1	R317	RP1 0 2121 JH000	Pretty Carbon	1kΩ	1/8W ±5%	1
R120	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ	1/8W ±5%	1	R318	RP2 2 3121 JH000	Pretty Carbon	22kΩ	1/8W ±5%	1
R121	RP3 3 1121 JH000	Pretty Carbon	330Ω	1/8W ±5%	1	R319	RP6 8 2121 JH000	Pretty Carbon	6.8kΩ	1/8W ±5%	1
R123	RP1 8 3121 JH000	Pretty Carbon	18kΩ	1/8W ±5%	1	R320	RP3 3 1121 JH000	Pretty Carbon	330Ω	1/8W ±5%	1
R124	RP1 0 3121 JH000	Pretty Carbon	10kΩ	1/8W ±5%	1	R321	RD3 0 2251 JM000	Carbon	3kΩ	1/4W ±5%	1
R126	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ	1/8W ±5%	1	R322	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ	1/8W ±5%	1
R127	RP8 2 0121 JH000	Pretty Carbon	82Ω	1/8W ±5%	1	R323	RP3 3 0121 JH000	Pretty Carbon	33Ω	1/8W ±5%	1
R128	RP2 7 3121 JH000	Pretty Carbon	27kΩ	1/8W ±5%	1	R324	RP6 8 1121 JH000	Pretty Carbon	680Ω	1/8W ±5%	1
R129	RH4 7 0501 JH000	Metal	47Ω	1/2W ±5%	1	R325	RP1 8 3121 JH000	Pretty Carbon	18kΩ	1/8W ±5%	1
R130	RP4 7 0121 JH000	Pretty Carbon	47Ω	1/8W ±5%	1	R326	RP1 5 3121 JH000	Pretty Carbon	15kΩ	1/8W ±5%	1
R131	RP3 3 3121 JH000	Pretty Carbon	33kΩ	1/8W ±5%	1	R327	RP6 8 A121 JH000	Pretty Carbon	6.8Ω	1/8W ±5%	1
R132	RP1 8 3121 JH000	Pretty Carbon	18kΩ	1/8W ±5%	1	R328	RD9 1 0251 JM000	Carbon	91Ω	1/4W ±5%	1
R133	RP1 5 3121 JH000	Pretty Carbon	15kΩ	1/8W ±5%	1	R329	RD4 3 0251 JM000	Carbon	43Ω	1/4W ±5%	1
R134	RP1 0 3121 JH000	Pretty Carbon	10kΩ	1/8W ±5%	1	R330	RP1 0 2121 JH000	Pretty Carbon	1kΩ	1/8W ±5%	1
R136	RP1 0 1121 JH000	Pretty Carbon	100Ω	1/8W ±5%	1	R331	RP3 3 0121 JH000	Pretty Carbon	33Ω	1/8W ±5%	1
R201	RP1 0 2121 JH000	Pretty Carbon	1kΩ	1/8W ±5%	1	R332	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ	1/8W ±5%	1
R202	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ	1/8W ±5%	1						
R203	RD3 3 2251 JM000	Carbon	3.3kΩ	1/4W ±5%	1						
R204	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ	1/8W ±5%	1						
R205	RP1 0 0121 JH000	Pretty Carbon	10Ω	1/8W ±5%	1						
R206	RD8 2 3251 JM000	Carbon	82kΩ	1/4W ±5%	1						
R207	RP6 8 3121 JH000	Pretty Carbon	68kΩ	1/8W ±5%	1						
R208	RP7 5 2121 JH000	Pretty Carbon	7.5kΩ	1/8W ±5%	1						
R209	RP2 7 3121 JH000	Pretty Carbon	27kΩ	1/8W ±5%	1						
R210	RP2 7 3121 JH000	Pretty Carbon	27kΩ	1/8W ±5%	1						
R211	RP1 5 2121 JH000	Pretty Carbon	1.5kΩ	1/8W ±5%	1						
R212	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ	1/8W ±5%	1						
R213	RP2 2 3121 JH000	Pretty Carbon	22kΩ	1/8W ±5%	1						
R214	RP8 2 2121 JH000	Pretty Carbon	8.2kΩ	1/8W ±5%	1						
R215	RP6 8 4121 JH000	Pretty Carbon	680kΩ	1/8W ±5%	1						
R216	RP4 7 2121 JH000	Pretty Carbon	4.7kΩ	1/8W ±5%	1						
R217	RP1 0 4121 JH000	Pretty Carbon	100kΩ	1/8W ±5%	1						
R218	RP1 0 2121 JH000	Pretty Carbon	1kΩ	1/8W ±5%	1						
R219	RP1 8 4121 JH000	Pretty Carbon	180kΩ	1/8W ±5%	1						
R220	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ	1/8W ±5%	1						
R221	RP3 3 1121 JH000	Pretty Carbon	330Ω	1/8W ±5%	1						
R223	RP1 8 3121 JH000	Pretty Carbon	18kΩ	1/8W ±5%	1						
R224	RP1 0 3121 JH000	Pretty Carbon	10kΩ	1/8W ±5%	1						
R226	RD2 2 2251 JM000	Carbon	2.2kΩ	1/4W ±5%	1						
R227	RP8 2 0121 JH000	Pretty Carbon	82Ω	1/8W ±5%	1						
R228	RP2 7 3121 JH000	Pretty Carbon	27kΩ	1/8W ±5%	1						
R229	RH4 7 0501 JH000	Metal	47Ω	1/2W ±5%	1						
R230	RP4 7 0121 JH000	Pretty Carbon	47Ω	1/8W ±5%	1						
R231	RP3 3 3121 JH000	Pretty Carbon	33kΩ	1/8W ±5%	1						
R232	RP1 8 3121 JH000	Pretty Carbon	18kΩ	1/8W ±5%	1						
R233	RP1 5 3121 JH000	Pretty Carbon	15kΩ	1/8W ±5%	1						
R234	RP1 0 3121 JH000	Pretty Carbon	10kΩ	1/8W ±5%	1						
R236	RP1 0 1121 JH000	Pretty Carbon	100Ω	1/8W ±5%	1						

RADIO TUNER P.C.B. ASSY

PCB2	4 1259 71870	Radio Tuner P.C.B. Assy	1
	4 2369 70740	RT Pin	6
	101 3 1302 60411	Screw, Pan Hd. +M2.6x4	2
	141 2 4729 04700	Staple, 10mm	8
	141 2 4729 05000	Staple, 5mm	11
CN1	4 2369 73380	Connector 5P	1
S1	4 2319 73861	Slide Switch (Band Select)	1
L1	4 2599 70810	RF Coil	1
L2	4 2589 70740	OSC Coil	1
L3	4 2659 70201	Loading Coil	1
L4	4 2579 71300	Bar Antenna	1
L5	4 2539 71021	Band Pass Filter	1
T1	4 2569 70301	IFT	1
T2	4 2569 71340	IFT FM	1
T3	4 2569 71030	IFT 455KHz	1
T4	4 2569 71022	IFT 455KHz	1
T5	4 2569 71120	IFT AM	1
T6	4 2579 70690	Antenna Coil	1
T7	4 2589 71342	OSC Trans	1
T8	4 2589 71353	OSC Trans	1
T9	4 2589 71410	OSC Trans	1
TC1	4 2249 70580	Trimmer Condenser	1
TC2	4 2249 70580	Trimmer Condenser	1
TC3	4 2249 70580	Trimmer Condenser	1
TC4	4 2249 70580	Trimmer Condenser	1
TC5	4 2249 70580	Trimmer Condenser	1
P1	4 2229 73053	Potentiometer (B-5kΩ)	1
PVC1	4 2249 70451	Variable Condenser	1
CF1	4 2539 70880	Ceramic Filter	1

P.C.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description	Q'ty	Ref. No.	Part No.	Description	Q'ty		
D1	4 2029 70790	Diode, ITT410	1	R15	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ 1/8W ±5%	1	
IC1	4 2069 71590	IC, AN7213	1	R16	RP5 6 2121 JH000	Pretty Carbon	5.6kΩ 1/8W ±5%	1	
IC2	4 2069 71730	IC, TA7640AP	1	R17	RP5 6 2121 JH000	Pretty Carbon	5.6kΩ 1/8W ±5%	1	
IC3	4 2069 71660	IC, TA7343P	1	R18	RP4 7 0121 JH000	Pretty Carbon	47Ω 1/8W ±5%	1	
C1	CI2 2 3160 XG00R	Boundary	0.022μF 16V +40,-20%	1	R19	RP3 3 3121 JH000	Pretty Carbon	33kΩ 1/8W ±5%	1
C2	CI2 2 3160 XG00R	Boundary	0.022μF 16V +40,-20%	1	R20	RP3 3 3121 JH000	Pretty Carbon	33kΩ 1/8W ±5%	1
C3	CC2 0 0500 JD00C	Ceramic	20pF 50V ±5%	1	R21	RP1 0 1121 JH000	Pretty Carbon	100Ω 1/8W ±5%	1
C4	CC1 8 0500 JD00C	Ceramic	18pF 50V ±5%	1	R22	RD3 3 2251 JM000	Carbon	3.3kΩ 1/4W ±5%	1
C5	CI2 2 3160 XG00R	Boundary	0.022μF 16V +40,-20%	1	R23	RP1 0 0121 JH000	Pretty Carbon	10Ω 1/8W ±5%	1
C6	CC5 0 A500 CD00C	Ceramic	5pF 50V ±0.2pF	1	R24	RP3 3 0121 JH000	Pretty Carbon	33Ω 1/8W ±5%	1
C7	CC1 5 0500 JD00C	Ceramic	15pF 50V ±5%	1					
C8	CC1 0 0500 JD00C	Ceramic	10pF 50V ±5%	1					
C9	CI2 2 3160 XG00R	Boundary	0.022μF 16V +40,-20%	1					
C10	CI2 2 3160 XG00R	Boundary	0.022μF 16V +40,-20%	1					
C11	CI2 2 3160 XG00R	Boundary	0.022μF 16V +40,-20%	1					
C12	CI2 2 3160 XG00R	Boundary	0.022μF 16V +40,-20%	1					
C13	CC4 7 1500 KE00C	Ceramic	470pF 50V ±10%	1					
C14	CI2 2 3160 XG00R	Boundary	0.022μF 16V +40,-20%	1					
C15	CI2 2 3160 XG00R	Boundary	0.022μF 16V +40,-20%	1					
C16	CD1 0 6100 0000V	Electrolytic	10μF 10V	1					
C17	CD2 2 6100 0000V	Electrolytic	22μF 10V	1					
C18	CC6 0 A500 CD00C	Ceramic	6pF 50V ±0.2pF	1					
C19	CD1 0 5100 0000V	Electrolytic	1μF 10V	1					
C20	CD1 0 5100 0000V	Electrolytic	1μF 10V	1					
C21	CD3 3 5100 0000V	Electrolytic	3.3μF 10V	1					
C22	CS1 0 2500 J010F	Polystyrol	0.001μF 50V ±5%	1					
C23	CD1 0 6100 0000V	Electrolytic	10μF 10V	1					
C24	CI1 0 3250 KE00C	Boundary	0.01μF 25V ±10%	1					
C25	CI1 0 3250 KE00C	Boundary	0.01μF 25V ±10%	1					
C26	CD4 7 4500 0000V	Electrolytic	0.47μF 50V	1					
C27	CD4 7 4500 0000V	Electrolytic	0.47μF 50V	1					
C28	CI1 0 3250 KE00C	Boundary	0.01μF 25V ±10%	1					
C29	CI1 0 3250 KE00C	Boundary	0.01μF 25V ±10%	1					
C30	CI2 2 3250 KE00C	Boundary	0.022μF 25V ±10%	1					
C31	CD4 7 7100 0001V	Electrolytic	470μF 10V	1					
C32	CI1 0 2500 KE00R	Boundary	0.001μF 50V ±10%	1					
C33	CI2 2 3160 XG00R	Boundary	0.022μF 16V +40,-20%	1					
C34	CC1 5 0500 JD00C	Ceramic	15pF 50V ±5%	1					
C35	CC3 0 A500 CD00C	Ceramic	3pF 50V ±0.2pF	1					
C36	CC5 0 A500 CD00C	Ceramic	5pF 50V ±0.2pF	1					
C37	CC1 0 0500 JD00C	Ceramic	10pF 50V ±5%	1					
C38	CC1 0 0500 JD00C	Ceramic	10pF 50V ±5%	1					
C39	CC5 0 A500 CD00C	Ceramic	5pF 50V ±0.2pF	1					
C40	CP3 9 2500 J002V	Polypropylene	0.0039μF 50V ±5%	1					
C41	CS1 5 2500 J010F	Polystyrol	0.0015μF 50V ±5%	1					
C42	CS3 6 1500 J010F	Polystyrol	360pF 50V ±5%	1					
C43	CC8 0 A500 CD00C	Ceramic	8pF 50V ±0.2pF	1					
C44	CC5 0 A500 CD00C	Ceramic	5pF 50V ±0.2pF	1					
C45	CC1 8 0500 JD00C	Ceramic	18pF 50V ±5%	1					
C46	CI2 2 3160 XG00R	Boundary	0.022μF 16V +40,-20%	1					
R1	RP1 0 0121 JH000	Pretty Carbon	10Ω 1/8W ±5%	1					
R2	RP2 2 1121 JH000	Pretty Carbon	220Ω 1/8W ±5%	1					
R3	RP1 8 3121 JH000	Pretty Carbon	18kΩ 1/8W ±5%	1					
R4	RP3 3 4121 JH000	Pretty Carbon	330kΩ 1/8W ±5%	1					
R5	RD3 3 4251 JM000	Carbon	330kΩ 1/4W ±5%	1					
R6	RP3 3 4121 JH000	Pretty Carbon	330kΩ 1/8W ±5%	1					
R7	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ 1/8W ±5%	1					
R8	RP4 7 0121 JH000	Pretty Carbon	47Ω 1/8W ±5%	1					
R9	RP4 7 0121 JH000	Pretty Carbon	47Ω 1/8W ±5%	1					
R10	RP1 0 2121 JH000	Pretty Carbon	1kΩ 1/8W ±5%	1					
R11	RP1 0 3121 JH000	Pretty Carbon	10kΩ 1/8W ±5%	1					
R12	RD5 6 1251 JM000	Carbon	560Ω 1/4W ±5%	1	J6	4 2359 73601	2P Jack (LINE IN)	1	
R13	RP1 5 4121 JH000	Pretty Carbon	150kΩ 1/8W ±5%	1	J7	4 2359 73601	2P Jack (LINE OUT)	1	
R14	RP2 2 2121 JH000	Pretty Carbon	2.2kΩ 1/8W ±5%	1	S7	4 2319 75590	Slide Switch (Beat Cancel)	1	

PC.BOARD PARTS LIST (Continued)

Ref. No.	Part No.	Description			Q'ty	
C330	CC3 3 1500 JD00C	Ceramic	330pF	50V	$\pm 5\%$	1
C331	CC6 8 1500 JD00C	Ceramic	680pF	50V	$\pm 5\%$	1
R122	RP2 2 2121 JH000	Pretty Carbon	2.2k Ω	1/8W	$\pm 5\%$	1
R135	RP1 5 3121 JH000	Pretty Carbon	15k Ω	1/8W	$\pm 5\%$	1
R222	RP2 2 2121 JH000	Pretty Carbon	2.2k Ω	1/8W	$\pm 5\%$	1
R235	RP1 5 3121 JH000	Pretty Carbon	15k Ω	1/8W	$\pm 5\%$	1

NOTES:

1. Parts order must contain Model Number, Part Number and Description.
2. Ordering quantity of screws and resistors must be multiple of 10 pcs.

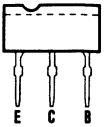
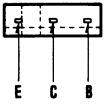
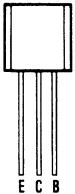
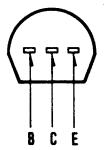
The following two kinds of Erase Heads are used in Model M7770K.

Note that the different parts are marked \times in the circuit diagram.

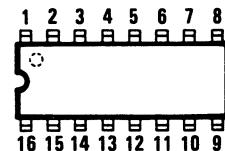
- * Refer to the parts list on the former pages for the Erase Head (4 2429 72200).
- * Refer to the parts list as described below for the Erase Head (4 2429 72201).

Ref. No.	Part No.	Description			Q'ty	
MECHANISM						
MC17	4 2429 72201	Erase Head [HD2]				1
AMPLIFIER P.C.B. ASSY						
C323	CP1 1 3101 G000V	Polypropylen	0.011 μ F	100V	$\pm 2\%$	1
R327	RP1 0 0121 JH000	Pretty Carbon	10 Ω	1/8W	$\pm 5\%$	1

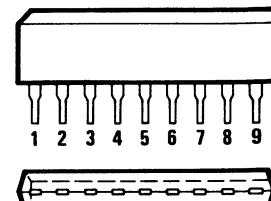
IC & TRANSISTOR LEAD IDENTIFICATION

FRONT VIEW	BOTTOM VIEW	TRANSISTOR
		2SA937 2SC2021
		2SC536 2SD734
TERMINAL NAME		
B⇒ BASE C⇒ COLLECTOR E⇒ EMITTER		

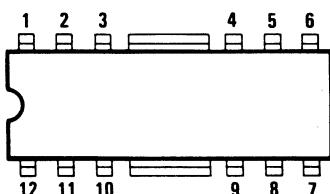
TA7640AP BOTTOM VIEW
TC9138AP



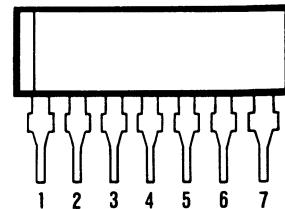
TA7343P FRONT/BOTTOM VIEW



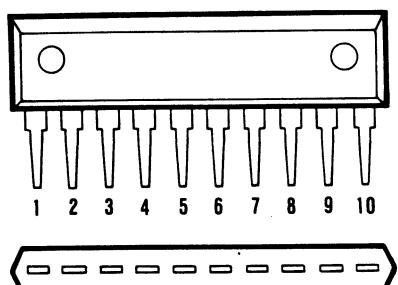
LA4192 BOTTOM VIEW



AN7213 FRONT/BOTTOM VIEW

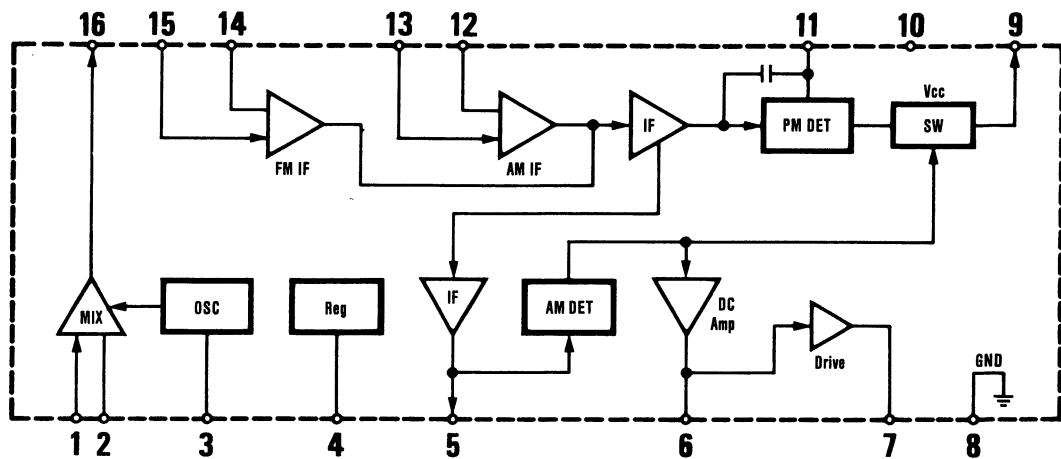


M5154L FRONT/BOTTOM VIEW

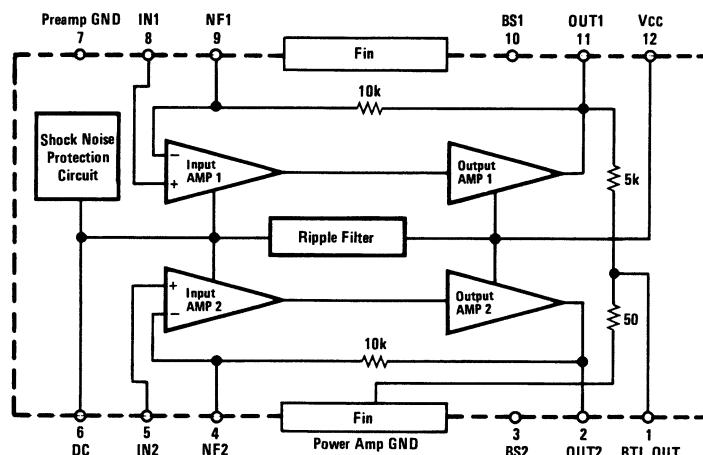


IC & TRANSISTOR LEAD IDENTIFICATION (Continued)

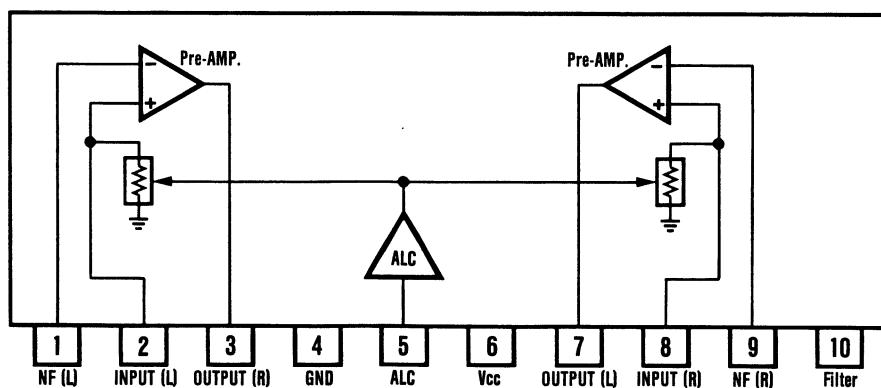
TA7640AP BLOCK DIAGRAM



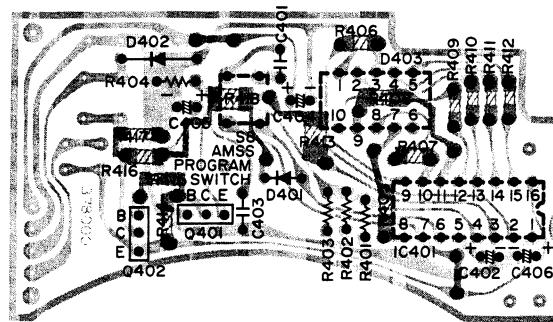
LA4192 BLOCK DIAGRAM



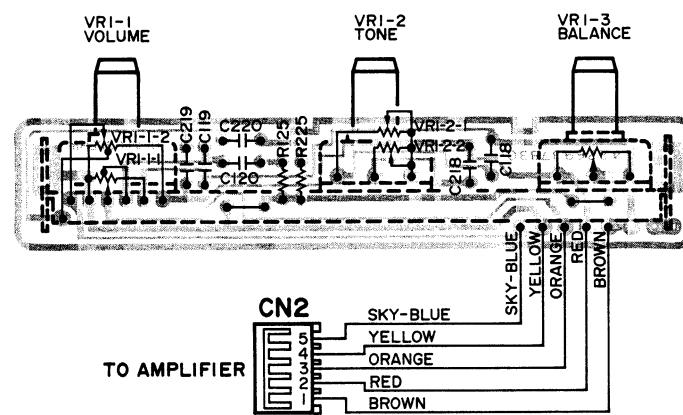
M51544L BLOCK DIAGRAM



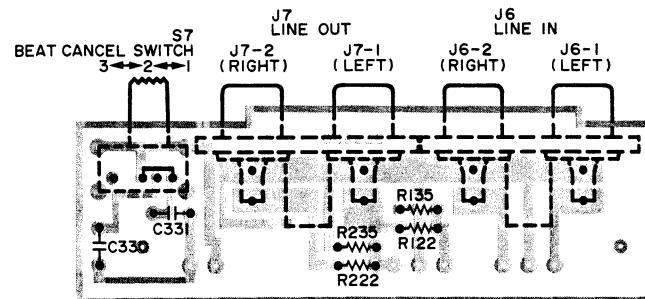
AMSS PROGRAM P.C.BOARD



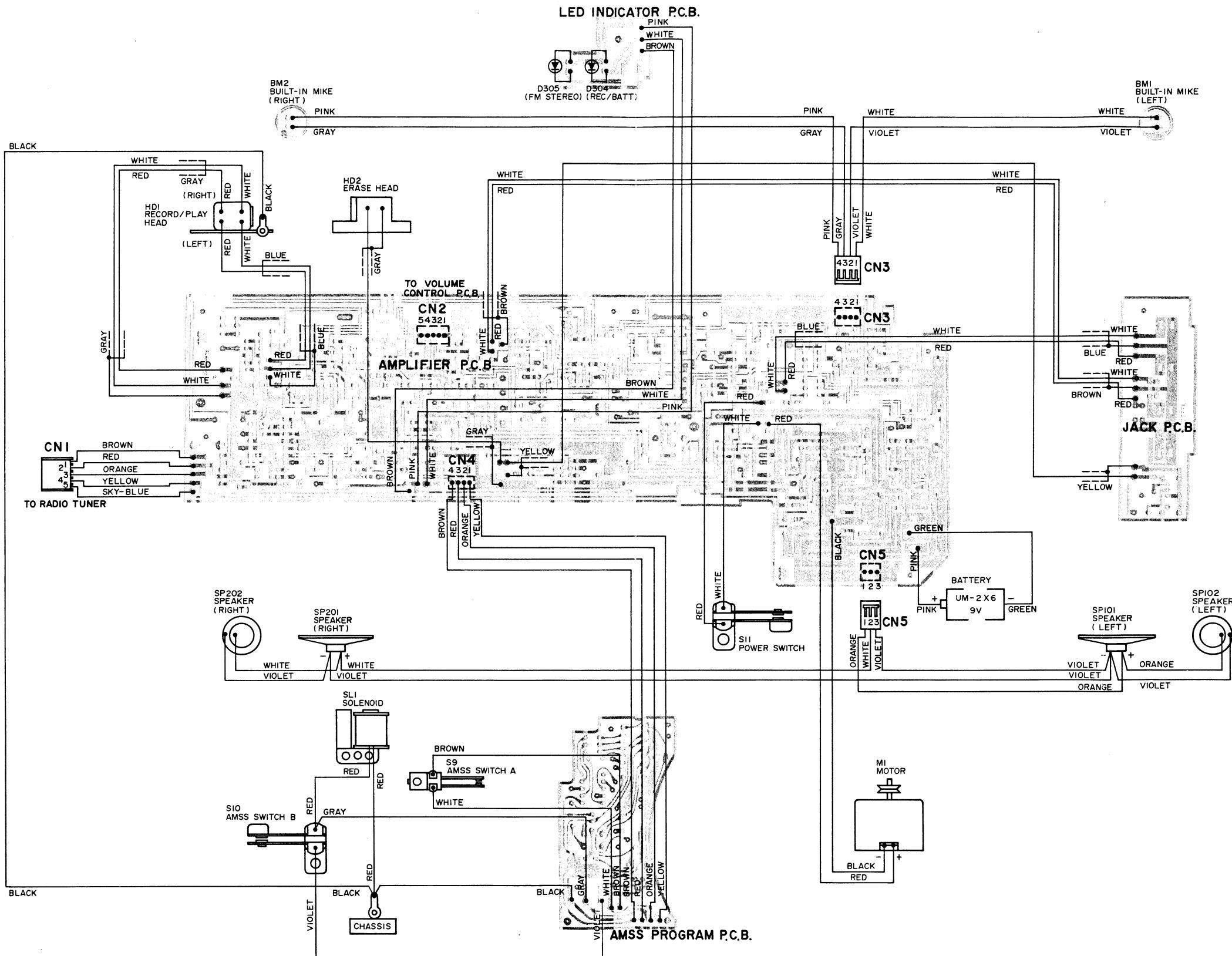
VOLUME P.C.BOARD



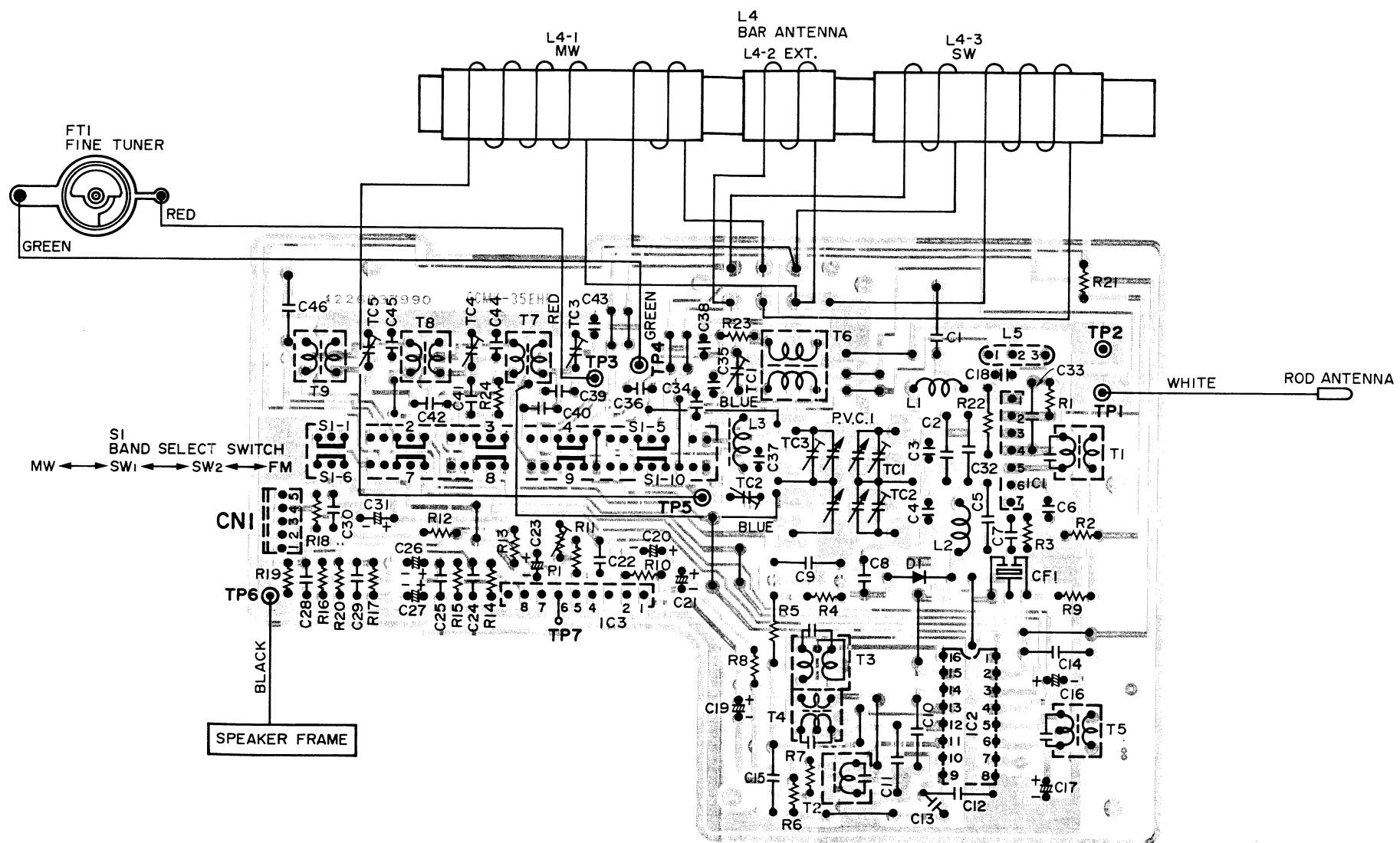
JACK P.C.BOARD



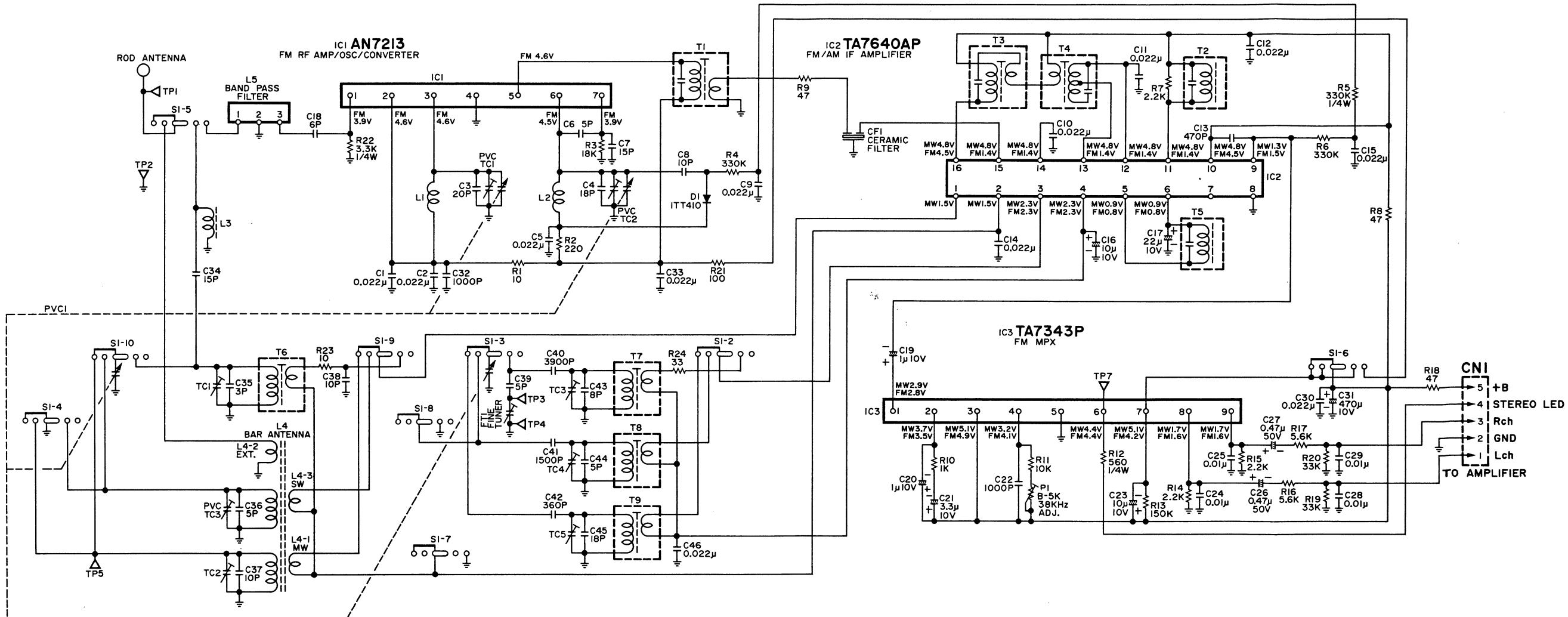
WIRING DIAGRAM



RADIO TUNER P.C.BOARD

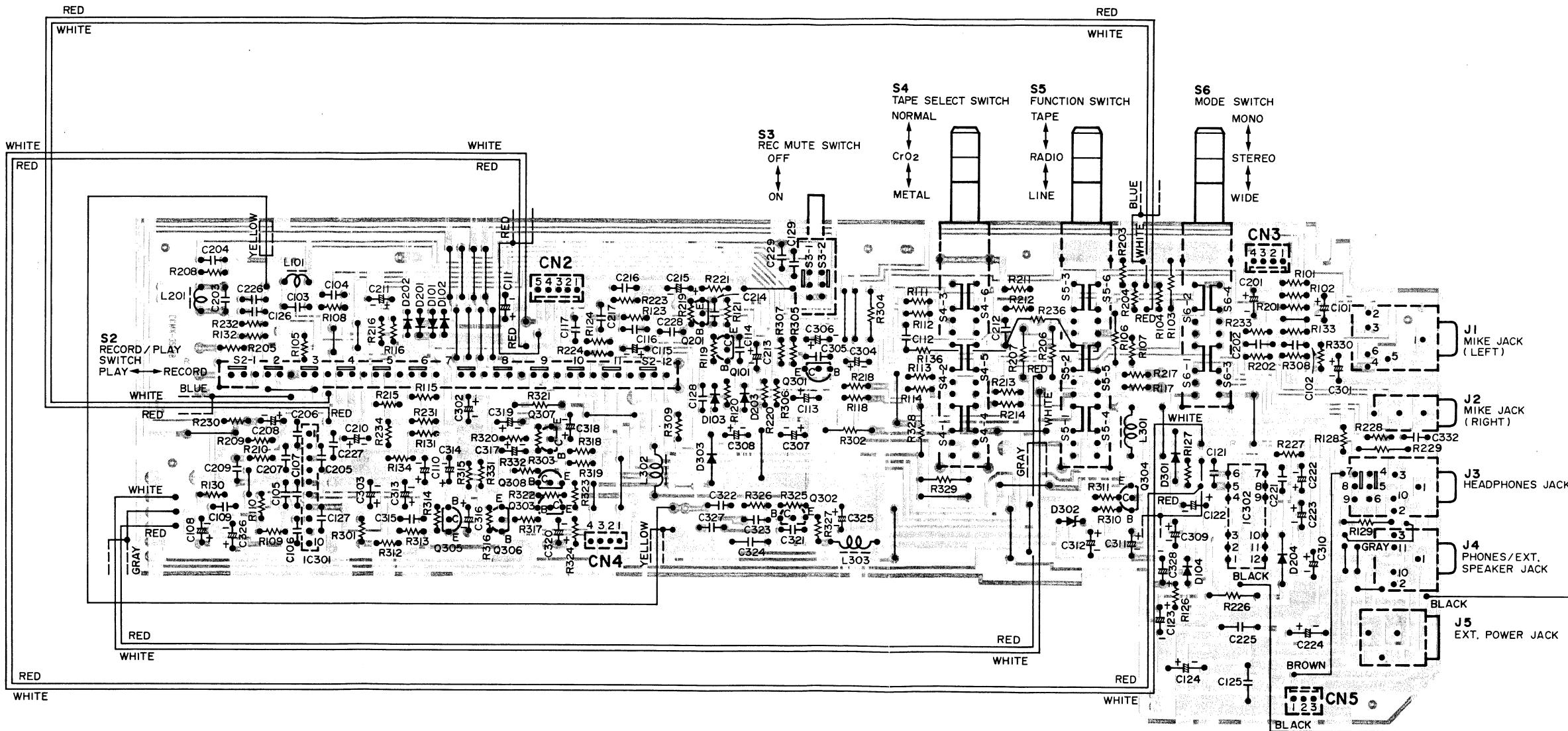


SCHEMATIC DIAGRAM (Tuner)



No.	Name	Position	No.	Name	Position
S1	BAND SELECT Switch	MW	S7	BEAT CANCEL Switch	1
S2	RECORD/PLAY Switch	S8	OFF	AMSS PROGRAM Switch	OFF
S3	REC MUTE Switch	S9	OFF	AMSS Switch A	OFF
S4	TAPE SELECT Switch	S10	NORMAL	AMSS Switch B	OFF
S5	FUNCTION Switch	S11	TAPE	POWER Switch	OFF
S6	MODE Switch		MONO		

AMPLIFIER P.C.BOARD



SCHEMATIC DIAGRAM (Amplifier)

