

SERVICE MANUAL

FISHER

MC-3000

**INTEGRATED MUSIC SYSTEM
STEREO RECEIVER**



WORLD LEADER IN HIGH QUALITY STEREO

SPECIFICATIONS

FM TUNER SECTION

Usable Sensitivity (IHF Standard)	5 μ V
Harmonic Distortion (at 400 Hz, 100% Modulation)	
Mono	1.0%
Stereo	1.5%
Signal-to-Noise Ratio (at 100% Modulation & 1mV Input)	60dB
Selectivity	36dB
Image Frequency Rejection (at 88 MHz)	40dB
IF Frequency Rejection (at 88 MHz)	70dB
FM Stereo Separation (at 1 KHz)	30dB
Capture Ratio, IHF, at 1mV	3dB

AM TUNER SECTION

Usable Sensitivity (IHF Standard) S/N 20dB	
Loop Antenna	250 μ V/m
Selectivity (at 1 MHz & \pm 10 KHz)	30dB
Image Frequency Rejection (at 1 MHz)	50dB
IF Frequency Rejection (at 1 MHz)	40dB

POWER AMPLIFIER SECTION

Minimum continuous RMS sine wave power per channel from 60 to 15,000Hz with less than 1% total harmonic distortion into an 8 ohm load	7 watts
Sensitivities (for rated output power at 8 ohms, 1 KHz)/Impedances	
Phono (Magnetic)	2.5mV/50K ohm
Phono (Ceramic)	300mV/1M ohm
Auxiliary	200mV/100K ohm

Hum & Noise (below rated output)	
Phono (Magnetic)	62dB
Phono (Ceramic)	62dB
Auxiliary	62dB
Frequency Response \pm 2.0dB	40 – 15,000 Hz
Bass Control Range (at 100 Hz)	\pm 8dB
Treble Control Range (at 10 KHz)	\pm 8dB
Loudness Contour (at 40dB volume attenuation fixed)	+8dB at 100 Hz +5dB at 10 KHz

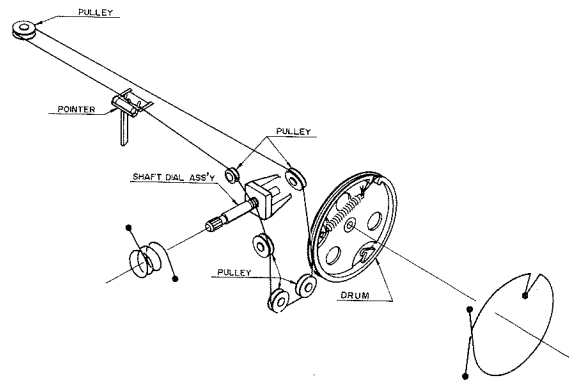
TAPE SECTION

Tape Speed	3.75 ips
Wow and Flutter, maximum	0.2%
Signal-to-Noise Ratio	40dB
Channel Separation	35dB
Crosstalk	45dB
Distortion	2.0%

GENERAL

AC Power	120V
Frequency	50/60 Hz
Consumption	65 Watts
Dimensions (including control panel, cabinet)	18-15/16" (W) 5-9/16" (H) 12-25/32" (D)

DIAL CORD STRINGING



8 TRACK TAPE DECK ADJUSTMENT

1. Recommended Test Equipment

- Two Vacuum Tube Volt Meters
- Test tapes RCA-321, Pony-806, or Victor-801 (Track 1 and 3 with 1kHz and track 6 with 8kHz test signals)

2. Head Height Adjustment

- Use test cartridge tape (RCA-321 or Pony-806).
- Push program selector button to position tapehead to track 2 (on channel 2).
- Connect two Vacuum Tube Volt Meters to left and right channels.
- Turn the head height adjust screw slowly counterclockwise or clockwise and adjust for a null. For correct tapehead position, make sure there is a peak on either side of the null at the point where the output is minimum. Glyptol screw after correct positioning is attained.


- Switch to channel 4 and back to 2 again, make sure that the output on channel 2 is at minimum. Should the output on channel 2 be greater than on channel 4, repeat adjustments.

3. Azimuth Adjustment

- Use test tape cartridge RCA-321.
- Set tape player to track 2.
- Connect two Vacuum Tube Volt Meters to the left and right output channels.
- Adjust screw (A) with Phillips screwdriver for a balance at maximum output.
- Glyptol adjust screw after correct positioning is attained.



ALIGNMENT PROCEDURES

AM ADJUSTMENT

Step	Adjusting circuit	Connections		SG. frequency	Position of tuning dial	Adjustment	V.T.V.M. Oscilloscope
		Input	Output				
1	IF	Connect sweep generator to VC4.	Connect oscilloscope to test point TP2.	455 KHz	Max. capacity of VC. at position with no signal.	AM 1st* 9-20970 (Red, Blue) AM 2nd* 9-20980 (Non adj.)	
2	RF	Connect standard loop antenna to output terminals of SG. Place receiver 2 feet from loop antenna.	Connect V.T.V.M. to speaker terminals.	600 KHz (400Hz, 30% modulation)	600 KHz	AM ANT 9-21014 AM OSC 9-20700 (Red)	Max.
3				1400 KHz (400Hz, 30% modulation)	1400 KHz	TC4 TC5	Max.
4	Repeat adjustments.						

1. Variable capacitor completely closed.
 2. Set the dial pointer to left line on dial scale.
 3. Connect sweep generator, SG, V.T.V.M. and oscilloscope.
 4. Function switch to "AM".
 5. Use a screwdriver with plastic grip for all adjustments.
- *NOTE: On some production units IF transformers 9-21340 and 9-21330 are utilized.

FM ADJUSTMENT

Step	Adjusting circuit	Connections		SG. frequency	Position of tuning dial	Adjustment	V.T.V.M. Oscilloscope
		Input	Output				
1	IF	Connect sweep generator to test point TP1 through 0.01 μ F.	Connect oscilloscope to test point TP3.	10.7 MHz (no modulation)	Max. capacity of VC. at position with no signal.	FM 1st 9-20890 (Violet) 9-20900 (Orange)	
2	Ratio Det		Connect oscilloscope to test point TP4.			FM 2nd 9-20160 (Non adj.)	
3	RF	Connect FM SG. to FM ANT. terminals.	Connect V.T.V.M. to speaker terminal.	90 MHz (400Hz, 30% modulation)	90 MHz	FM ANT 9-20990 FM OSC 9-20461 FM Coil 9-20270	Max.
4				106 MHz (400Hz, 30% modulation)	106 MHz	TC1 TC2 TC3	Max.
5	Repeat adjustments.						

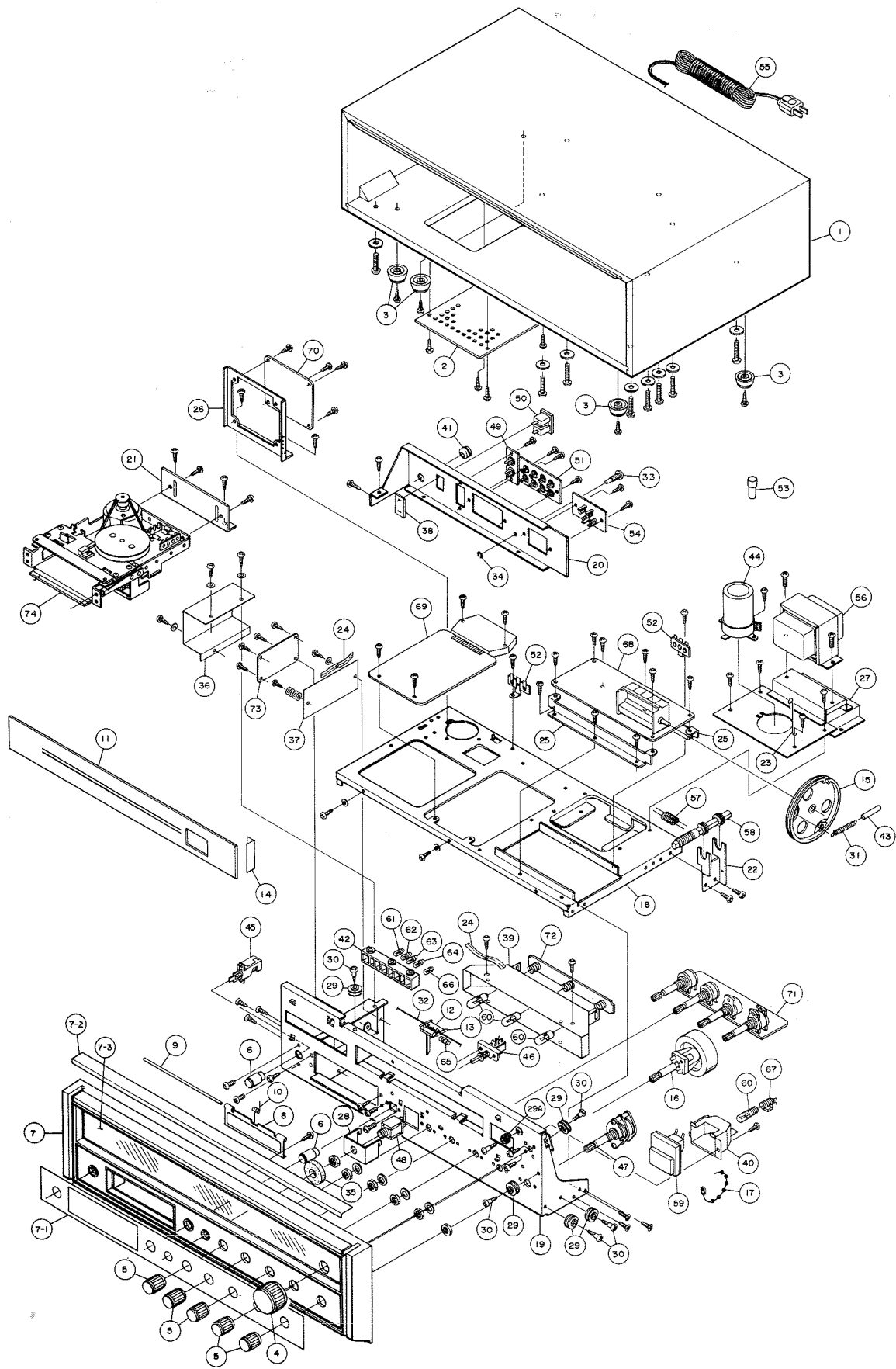
1. Variable capacitor completely closed.
2. Set the dial pointer to left line on dial scale.
3. Connect sweep generator, FM SG, V.T.V.M. and oscilloscope (FM antenna input impedance is 300 ohm.)
4. Function switch to "FM"
5. Use a screwdriver with plastic grip for all adjustments.

FM MPX ADJUSTMENT

Step	Adjusting circuit	Connections		Position of tuning dial	Adjustment	V.T.V.M.
		Input	Output			
1	SCA signal filter (67 KHz)	Add SCA signal to FM stereo SG. and connect to FM ANT. terminals. FM stereo signal OFF.	Connect V.T.V.M. to test point TP5.	Max. capacity of VC. at position with no signal.	67KHz 9-20140 (Red)	Min.
2	38 KHz	Connect FM stereo SG. to FM ANT terminals. 19KHz signal ON. Main channel, sub channel signal ON. Add 1000Hz signal from L Ch.	Connect V.T.V.M. to test point TP6.		38KHz 9-20210 (Black) 9-20220 (White)	Max.
3	FM stereo signal separation		Connect V.T.V.M. to R speaker terminal.			Min.
4		Connect FM stereo SG. to FM ANT terminals. 19KHz signal ON. Main channel, sub channel signal ON. Add 1000Hz signal from R Ch.	Connect V.T.V.M. to L speaker terminal.		38KHz 9-20210 (Black)	Min.
5	Repeat steps 3 - 4.					

1. Variable capacitor completely closed.
2. Connect FM stereo SG. and V.T.V.M.
3. Function switch to "FM STEREO"
4. Use a screwdriver with plastic grip for all adjustments.

CABINET & CHASSIS EXPLODED VIEW



PARTS LIST

Ref. No.	Part No.	Description
CHASSIS – MECHANICAL		
1	131 0 8002 0860	Cabinet Assembly
2*	131 2 1410 13800	Bottom Cover P/O 1
3	131 2 1801 13200	Leg P/O 1
4	131 0 1001 34300	Knob Assy, Tuning
5	EK131 0 1001 33800	Knob, Assy, Function, Volume, Balance, Bass, Treble
6	131 0 1001 34100	Knob Assy, Power Program
7	131 0 1016 21200	Dress Panel Assembly
8	131 2 1103 17102	Door, 8 Track
9	131 2 2105 10700	Shaft, Door 8 Track
10	131 2 5101 14100	Spring, 8 Track Door Shaft
11	131 2 1201 27600	Dial Plate
12	131 2 4101 17100	Pointer, Plastic
13	131 2 4113 14000	Metal Slide, Pointer
14*	131 2 6113 21700	Plate Dial, Right
15	131 0 3002 10201	Drum Assembly, Tuning Gang
16	131 0 3003 18100	Tuning Shaft Assembly
17*	131 0 3016 10400	Wire Clamp Assembly
18*	131 2 3301 21002	Chassis
19*	131 2 3305 19600	Front Panel
20*	131 2 3306 21100	Rear Panel
21*	131 2 3310 13200	Support Bracket, 8 Track
22*	131 2 3603 13800	Support Bracket, AM Antenna
23*	131 2 3608 10800	Wire Clamp Assembly, AM Antenna
24*	131 2 3608 12700	Wire Clamp Assembly
25*	131 2 3614 17700	Mounting Bracket, (R.F.) P.C.B.
26*	131 2 3614 17800	Mounting Bracket, (EQUAL.) P.C.B.
27*	131 2 3617 14800	Mounting Bracket, Transformer
28*	131 2 3624 12200	Mounting Bracket, Headphones
29A	EA50540-3	Pulley, Small Dial Stringing
29	EA50540-1	Pulley, Large Dial Stringing
30	131 2 4108 10300	Spindle, Pulley
31	131 2 4111 00200	Tension Spring, Dial Stringing
32*	131 2 4112 10200	Dial Cord
33	131 2 4201 15400	Screw, Ground
34*	131 2 4206 11300	E Ring, Panel Rear
35*	131 2 4208 16400	Cushion, Headphone Jack
36	131 2 6101 20900	Plate Shield
37	131 2 6101 21000	Plate Shield, 8 TR. P.C.B.
38*	131 2 6107 19300	Insulator AC Outlet
39*	131 2 6110 24600	Housing Metal, Dial Lamp
40*	131 2 6110 25400	Housing Metal, Tuning Meter Lamp
41*	131 2 6111 14200	Bushing Line Cord
42*	131 2 6111 15300	Housing, Rubber, Indicator Lamps
43*	394 3 0004 0000	Tubing, Dial Tension Spring

Ref. No.	Part No.	Description
CHASSIS – ELECTRICAL		
44(C701)	CE0259757	Capacitor, Elect. 2200mF 50V
45(S1)	SP4231924070	Switch, Push, Power
46(S2)	SP4231924080	Switch, Push, Program
47(S6)	SR4231924450	Switch, Rotary, Function
48(J2)	JK4235921080	Jack, Headphone
49	JK4235921280	Jack, 2 RCA Phono, Speakers
50	JK4235921960	AC Outlet
51	JK4235922250	Jack, 8 RCA Phono, Rear Accessory Panel
52*	42379201400	Terminal Strip, AUX, FM ANTENNA
53*	42379209300	Wire Nut, AC LINE
54	ET42379215510	Terminal Strip, 4P, Antenna
55	W50023	AC Power Cord
56(T1)	TD4251923382	Power Transformer 110V
57(L701)	LC4253920140	Heater Choke Coil
58(921014)	LA42579210140	Antenna, AM
59(M1)	MC45119203040	Meter, Tuning
60	LM4612920100	Lamp, Screw Type 6.3V .25A Meter, Dial
61-64, 66	LM4612920539	Lamp 6V .25A Indicator
65	LM2767094	Lamp 5V 60MA, Pointer
67	1310400211400	Socket, Meter Lamp
C706,707	CK22349-1	Capacitor Ceramic, 0.01μF, 50V +80 -20%
C708,709	CK22347-1	Capacitor Ceramic, 100pF, 50V ±10%
R701,703	RF25DC102J	Resistor 1K ohm 1/4W 5%
R704,705	RF25DC124J	Resistor 120K ohm 1/4W 5%
R706,707	RF25DC473J	Resistor 47K ohm 1/4W 5%
R708,709	RC20BF185J	Resistor 1.8M ohm 1/2W 5%

* NOT A SERVICE PART

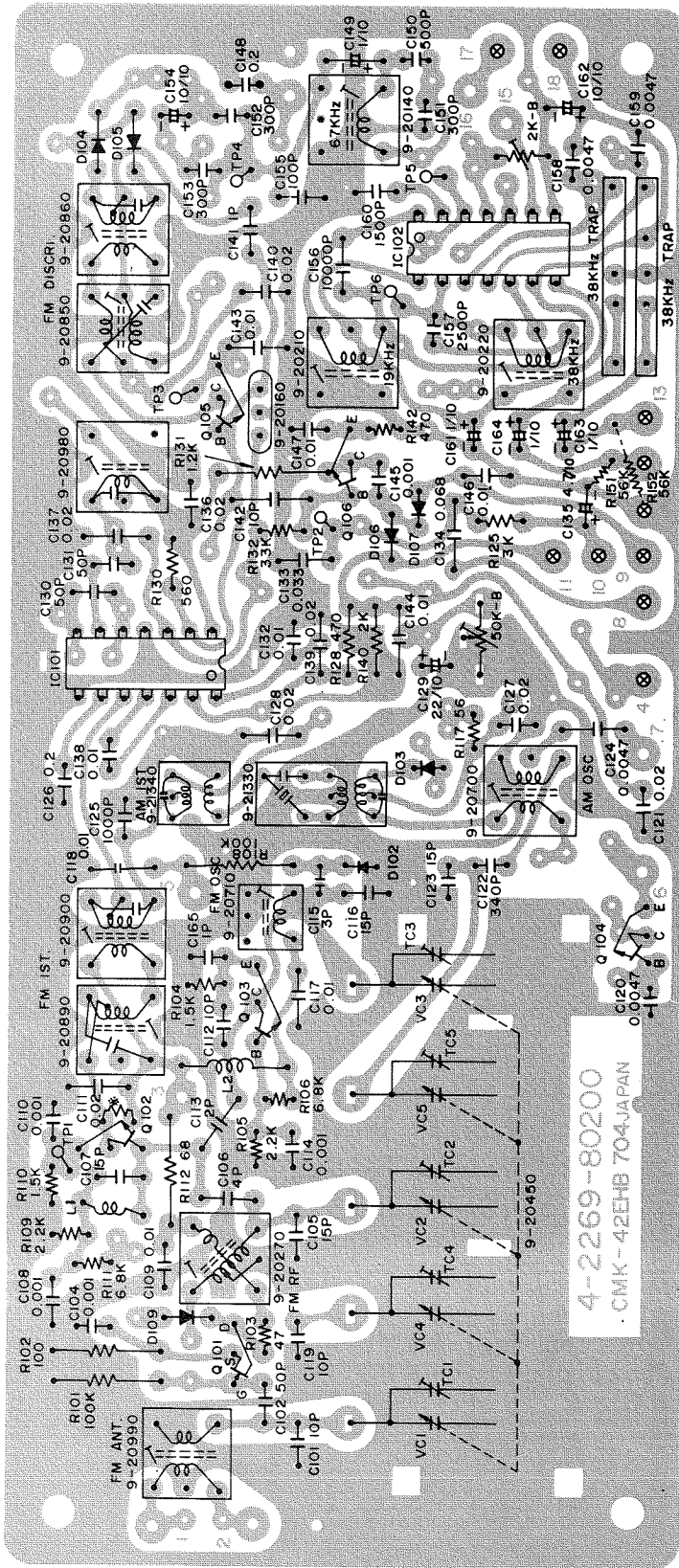
PARTS LIST

Ref. No.	Part No.	Description
RF, IF, MPX PCB ASSEMBLY PB1310400122148		
68	PB1310400122148	RF, IF, MPX PCB Assy.
VR101	RP4222921810	Potentiometer 50K-B IC Bias
VR102	RP4222922760	Potentiometer 2K-B
920450	CV4224920450	Variable Capacitor, Tuning Gang
	PC4227920140	Packaged Circuit 38KHz Filter
920160	ZK4227920160	Ceramic Filter 10.7MHz
L2	LC4253920120	IF Trap Coil
L1	LC4253920130	RF Filter Choke Coil
920850	ZZ4256920850	IF Transformer, FM Detector
920860	ZZ4256920860	IF Transformer, FM Detector
920890	ZZ4256920890	IF Transformer, FM
920900	ZZ4256920900	IF Transformer, FM
920970	ZZ4256920970	IF Transformer, AM
	(SEE NOTE)	
920980	ZZ4256920980	IF Transformer, AM
	(SEE NOTE)	
920990	LC4257920990	Antenna Coil, FM
920461	LC4258920461	FM Osc. Coil
920700	LC4258920700	AM Osc. Coil
920270	LC4259920270	RF Coil FM
920140	LC4265920140	Multiplex Coil, 67KHz
920210	LC4265920210	Multiplex Coil 19KHz
920220	LC4265920220	Multiplex Coil 38KHz
C163,164	CS22340-5	Capacitor, Sintered Alum. 1mF 10V
C148	CS-22340-2	Capacitor, Sintered Alum., 0.2mF, 10V
C126	C1BBDZ204TY	Capacitor, Semicon. 0.2mF 12V
C135	CE1252515	Capacitor, Electrolytic 4.7mF, 10V
C161	CE22342-2	Capacitor, Elect. 1mF 16V
C154,162	CE0252621	Capacitor, Elect. 10mF 16V
C129	CE1252522	Capacitor, Elect. 22mF 16V
C149	CE22342-2	Capacitor, Elect. 1mF 16V
C104,108, 110,114	CK22349-4	Capacitor, Ceramic .001mF, 50V
C109,118	CK22349-1	Capacitor, Ceramic .01mF 50V
C111	CK22349-3	Capacitor, Ceramic .02mF, 50V
C169,145	CK22349-4	Capacitor, Ceramic .001mF, 50V
C138,144, 146,147	CK22349-1	Capacitor, Ceramic .01mF, 50V
C121,128, 136,137	CK22349-3	Capacitor, Ceramic .02mF, 50V
139,140, 143,127		
C113	CK22346-3	Capacitor, Ceramic 2pF, 50V
C141,165	CK0248641	Capacitor, Ceramic 1pF, 50V
C115	CK22345-1	Capacitor, Ceramic 3pF, 50V
C142	CK22344-32	Capacitor, Ceramic 10pF, 50V
C106	CK22346-5	Capacitor, Ceramic 4pF, 50V
C112,101, 119	CK22344-32	Capacitor, Ceramic 10pF, 50V
C107,123	CK22344-9	Capacitor, Ceramic 15pF, 50V
C116	C1HCSJ150TJ	Capacitor, Ceramic 15pF, 50V N470
C155	CK22347-1	Capacitor, Ceramic 100pF, 50V
C105	CK22344-9	Capacitor, Ceramic 15pF, 50V
C152,153	CK22350-6	Capacitor, Ceramic 300pF, 50V
C102,130, 131	CK0242011	Capacitor, Ceramic 50pF, 50V
C132	CY22335-1	Capacitor, Mylar .01mF, 50V
C133	CY22335-14	Capacitor, Mylar .033mF, 50V
C120,158, 159	CY22335-8	Capacitor, Mylar .0047mF, 50V
C134	CY22335-16	Capacitor, Mylar .068mF, 50V
C124	CY22335-8	Capacitor, Mylar .0047mF, 50V
C151	CP0221322	Capacitor, Styrol 300pF, 50V
C150	C1HSEK501A	Capacitor, Styrol 500pF, 50V
C117	CK22349-1	Capacitor, Ceramic .01mF, 50V
C122	C1HSEJ341A	Capacitor, Styrol 340pF, 50V
C125	C1HSEK102A	Capacitor, Styrol 1000pF, 50V
C156	C1HSEK103A	Capacitor, Styrol 10,000pF, 50V
C160	CP0217813	Capacitor, Styrol 1500pF, 50V
C157	C1HSEK252A	Capacitor, Styrol 2500pF, 50V
R104,110	RF25DC152J	Resistor 1.5K ohm 1/4W 5%
R105,109	RF25DC222J	Resistor 2.2K ohm 1/4W 5%
R103	RF25DC470J	Resistor 47 ohm 1/4W 5%
R117	RF25DC560J	Resistor 56 ohm 1/4W 5%
R130,123, 129	RF25DC561J	Resistor 560 ohm 1/4W 5%
R150,151	RF25DC563J	Resistor 56K ohm 1/4W 5%

Ref. No.	Part No.	Description
RF, IF, MPX PCB ASSEMBLY PB1310400122148		
R106,111	RF25DC682J	Resistor 6.8K ohm 1/4W 5%
R102	RF25DC101J	Resistor 100 ohm 1/4W 5%
R101,108	RF25DC104J	Resistor 100K ohm 1/4W 5%
R112	RF25DC680J	Resistor 68 ohm 1/4W 5%
R140	RF25DC202J	Resistor 2K ohm 1/4W 5%
R141	RF25DC334J	Resistor 330K ohm 1/4W 5%
R113	RF25DC472J	Resistor 4.7K ohm 1/4W 5%
R114	RF25DC682J	Resistor 6.8K ohm 1/4W 5%
R115	RF25DC472J	Resistor 4.7K ohm 1/4W 5%
R116	RF25DC101J	Resistor 100 ohm 1/4W 5%
R118	RF25DC402J	Resistor 4K ohm 1/4W 5%
R119	RF25DC102J	Resistor 1K ohm 1/4W 5%
R120	RF25DC472J	Resistor 4.7K ohm 1/4W 5%
R122,128, 142	RF25DC471J	Resistor 470 ohm 1/4W 5%
R121	RF25DC103J	Resistor 10K ohm 1/4W 5%
R124	RF25DC222J	Resistor 2.2K ohm 1/4W 5%
R125	RF25DC302J	Resistor 3K ohm 1/4W 5%
R132	RF25DC333J	Resistor 33K ohm 1/4W 5%
R126	RF25DC152J	Resistor 1.5K ohm 1/4W 5%
R127	RF25DC101J	Resistor 100 ohm 1/4W 5%
R133	RF25DC681J	Resistor 680 ohm 1/4W 5%
R134	RF25DC102J	Resistor 1K ohm 1/4W 5%
R135	RF25DC102J	Resistor 1K ohm 1/4W 5%
R136	RF25DC680J	Resistor 68 ohm 1/4W 5%
R137	RF25DC101J	Resistor 100 ohm 1/4W 5%
R138	RF25DC682J	Resistor 6.8K ohm 1/4W 5%
R139	RF25DC682J	Resistor 6.8K ohm 1/4W 5%
R143	RF25DC102J	Resistor 1K ohm 1/4W 5%
R144	RF25DC682J	Resistor 6.8K ohm 1/4W 5%
R145	RF25DC682J	Resistor 6.8K ohm 1/4W 5%
R147	RF25DC472J	Resistor 4.7K ohm 1/4W 5%
R148	RF25DC391J	Resistor 390 ohm 1/4W 5%
R149	RF25DC332J	Resistor 3.3K ohm 1/4W 5%
D102	TRIS553	Diode, IS553
D103,104, 105,106, 107	TRIS188FM	Diode, IS188FM
D109	TRDS442	Diode DS442
Q103	TR2SC668D	Transistor, 2SC668D
Q102	TR2SC668E or D	Transistor, 2SC668D or E
Q104	TR2SC929E or D	Transistor, 2SC929D or E
Q105,106	TR2SC930E	Transistor, 2SC930E
Q101	TR2SK41F	Transistor, 2SK41F
IC101	TRLA1201	IC, LA1201
IC102	TRLA3301	IC, LA3301
R131	RF25DC122J	Resistor 1.2K ohm 1/4W 5%

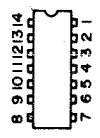
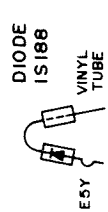
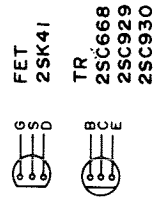
NOTE: Some production units utilizes IF Trans. type ZZ4256921340 and ZZ4256921330 proper parts are to be ordered by part number indicated on case.

CLASSIFICATION	Q 101	Q 102	Q 103	Q 104	Q 105	Q 106	DI03~DI07	DI09	IC101	IC102
TR	2SK41	25C668R	25C668R	25C929	25C930	25C930	IS188	DS-442	LA120I	LA330I
RANK	F	D,E	D	E,D	D,E	D,E	FMI		C	



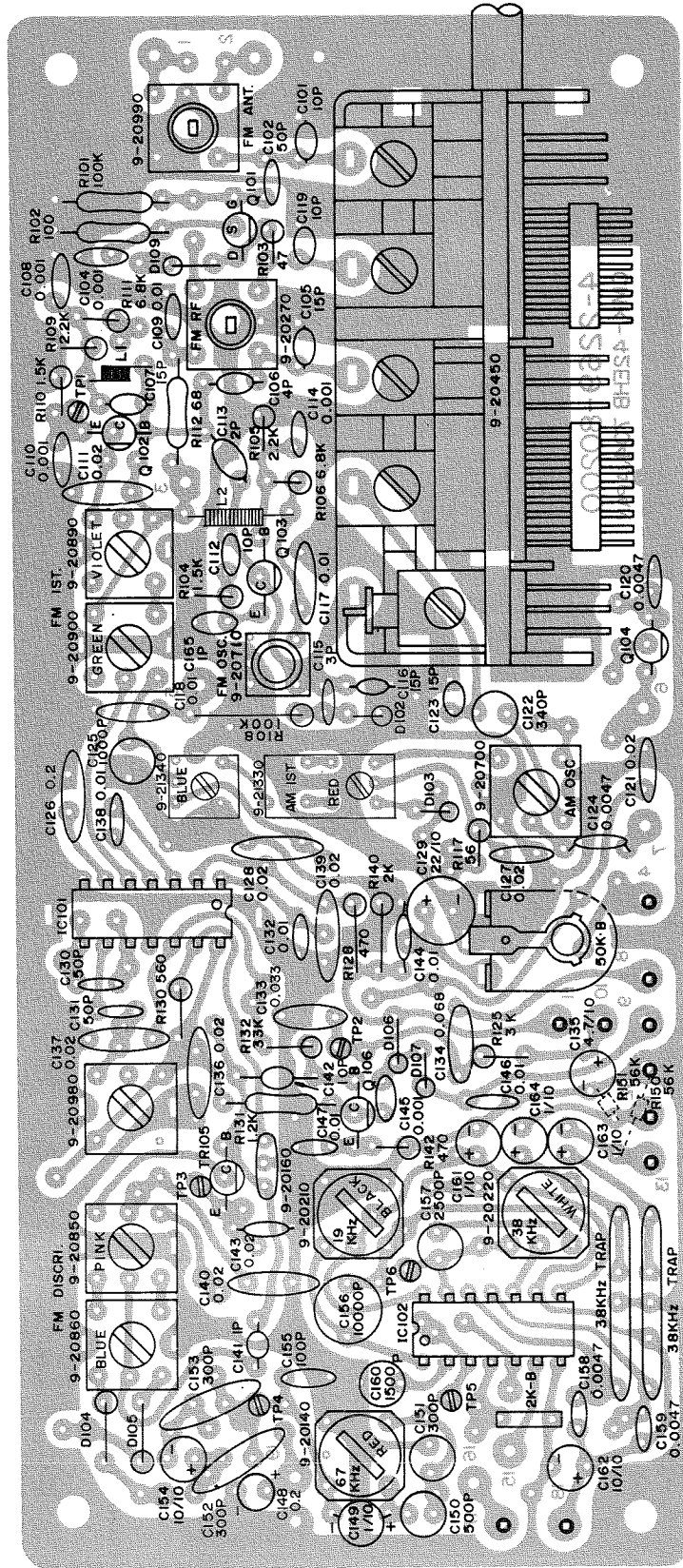
TERMINAL NO	TERMINAL NO
1,2	FM ANT
3	FM +B
4	AM +B
5,19	AFC
6,7	AM ANT
8	AM OUT
9,10,11	TU METER
	FM OUT (R)
	FM OUT (L)
	STEREO IND.
	INDICATOR +B
	+B (9V)

TRANSISTOR BOTTOM VIEW



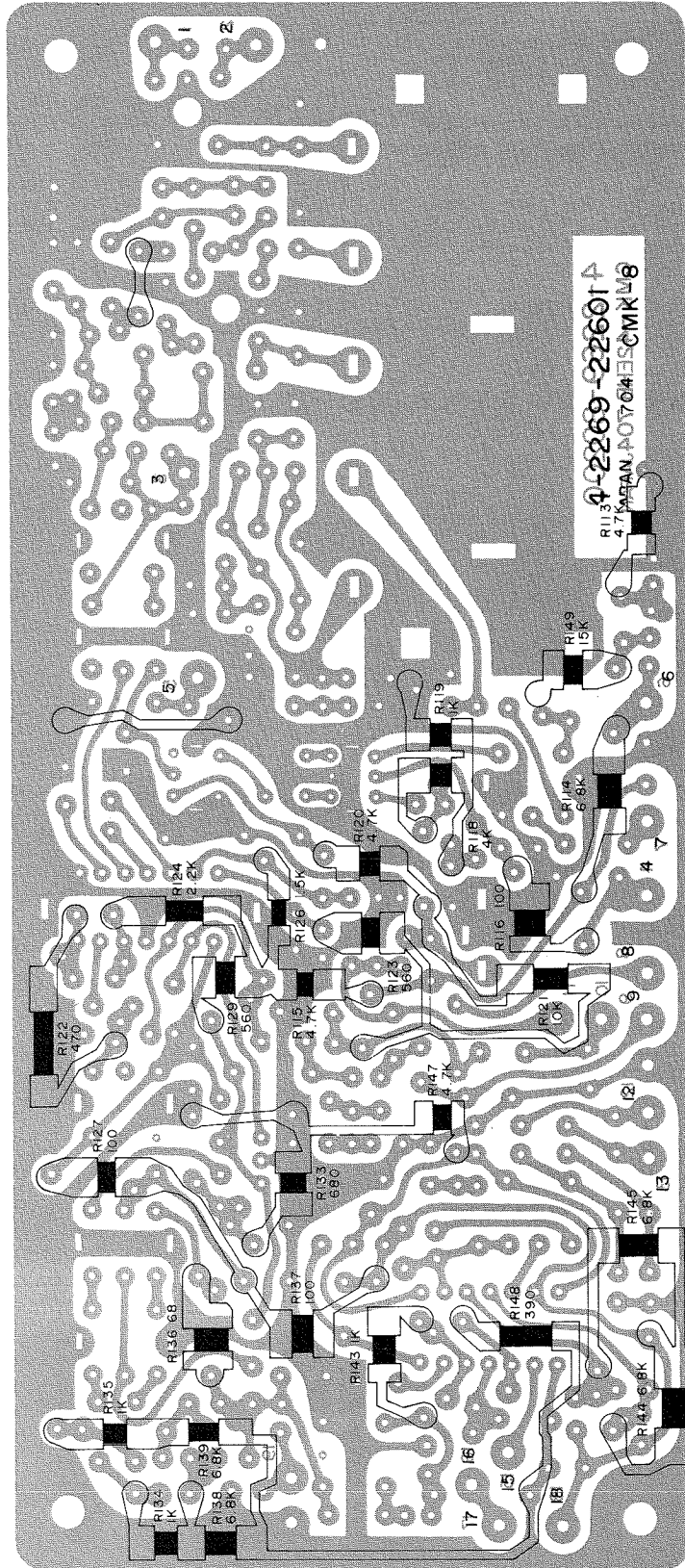
RF. IF. MPX. P.C.B. TOP VIEW PB1310400122148

CLASSIFICATION	Q 101	Q 102	Q 103	Q 104	Q 105	Q 106	DI03 ~DI07	DI09	IC101	IC102
TR	2SK41	2SC668R	2SC668R	2SC929	2SC930	2SC930	IS188	DS-442	LA1201	LA3301
RANK	F	D, E	D	E, D	D, E	D, E	FMI		C	



TERMINAL NO	TERMINAL NO
1, 2	FM ANT
3	FM +B
4	FM +B
5, 19	AFC
6, 7	AM ANT
8	AM OUT
9, 10, 11	TU METER
	FM OUT (R)
	FM OUT (L)
	STEREO IND.
	INDICATOR+B
	+B (9V)

RF. IF. MPX. P.C.B. PRINTED RESISTORS PB1310400122148



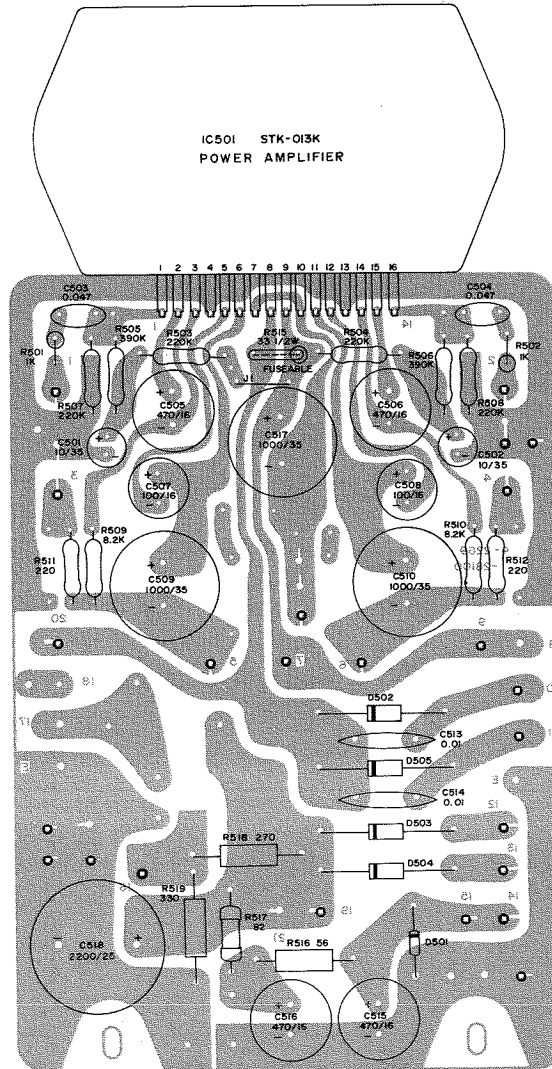
4-2269-22601
MILAN, AOT 04 ESCMK 68

PARTS LIST

Ref. No.	Part No.	Description
MAIN POWER SUPPLY PCB ASSY PB1310400165302		
69	PB1310400165302	Main Power Supply PCB Assy
C507,508	CE22342-12	Capacitor, Elect. 100mF, 16V
C505,506,515,516	CE402470519	Capacitor, Elect. 470mF, 16V
C518	CECDV2200/25	Capacitor, Elect. 2200mF, 25V
C501,502	CE22342-28	Capacitor, Elect. 10mF, 35V
C503,504	C1HBDM473N	Semiconductor .047mF, 50V ±20%
C509,510,517	CDV1000/35	Capacitor, Elect. 1000mF, 35V
C513,514	C2HYSP103A	Capacitor Ceramic 0.01mF, 500V
D502,503,504,505	TR1N4002	Diode 1N4002
D501	TRRD9.1E	ZENER Diode RD9.1E

Ref. No.	Part No.	Description
MAIN POWER SUPPLY PCB ASSY PB1310400165302		
R511,512	RF25DC221J	Resistor 220 ohm 1/4W 5%
R503,504,507,508	RF25DC224J	Resistor 220K ohm 1/4W 5%
R505,506	RF25DC394J	Resistor 390K ohm 1/4W 5%
R509,510	RF25DC822J	Resistor 8.2K ohm 1/4W 5%
R501,502	RF25DC562J	Resistor 5.6K ohm 1/4W 5%
R518	RC20BF271J	Resistor 270 ohm 1/2W 5%
R519	RC20BF331J	Resistor 330 ohm 1/2W 5%
R515	R2HZPK470A	Resistor 47 ohm 1/2W 10%
IC501	TRSTK013K	IC STK013K
C520	CE22342-4	Capacitor, Elect. 10mF, 50V
C523,524	CK22359-3	Capacitor, Ceramic, 500pF, 50V
R516	RC20BF560J	Resistor 56 ohm 1/2W 5%
R517	RC20BF820J	Resistor 82 ohm 1/2W 5%

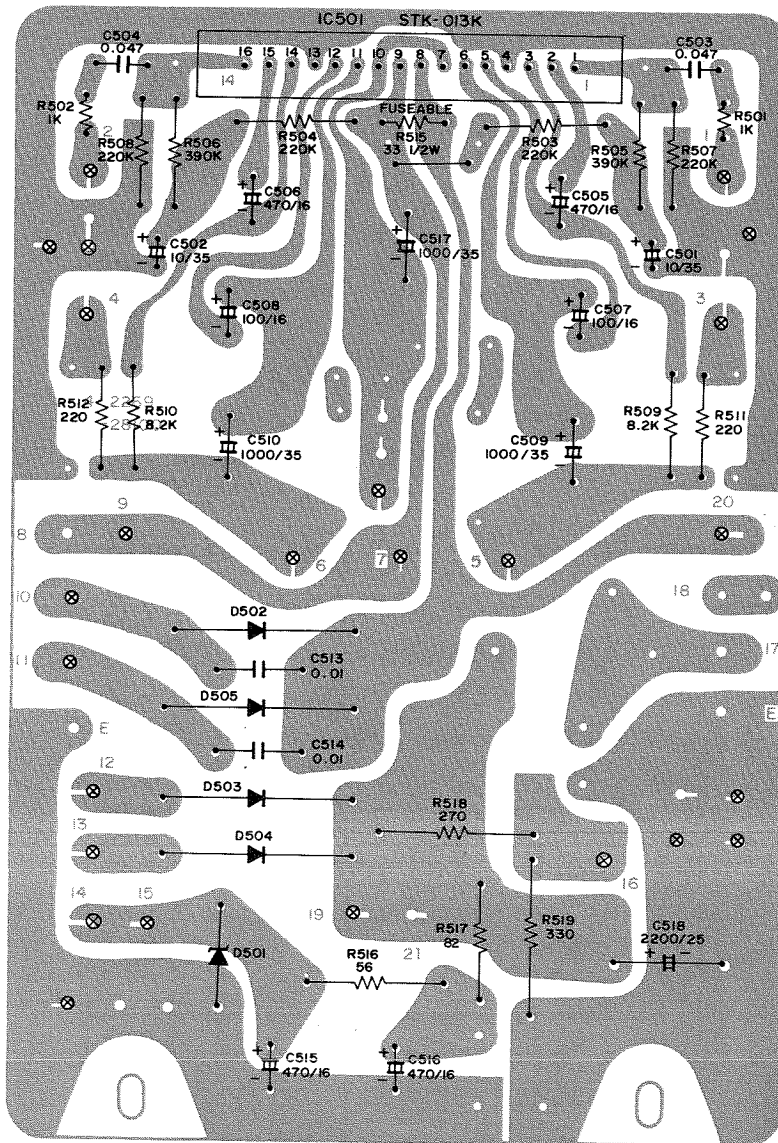
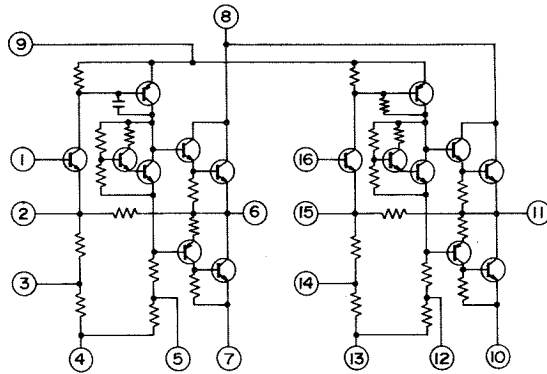
MAIN POWER SUPPLY PCB TOP VIEW PB1310400165302



D501 RD-9E D502 ~ 505 IN4002

MAIN POWER SUPPLY PCB BOTTOM VIEW PB1310400165302

STK-013K



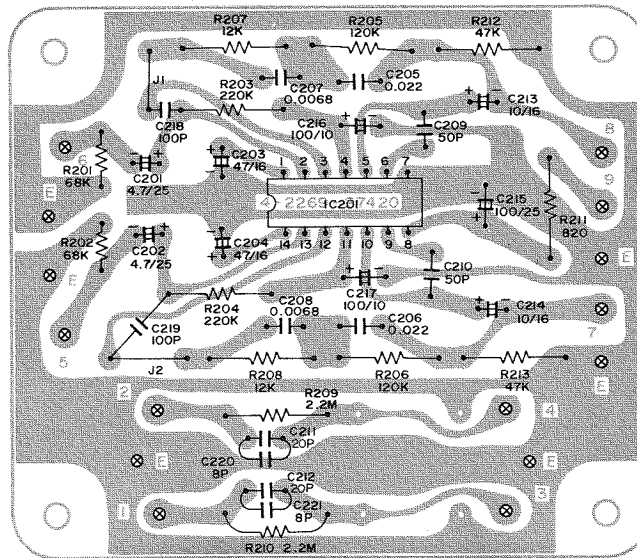
D501 RD-9E D502 ~ 505 IN4002

PARTS LIST

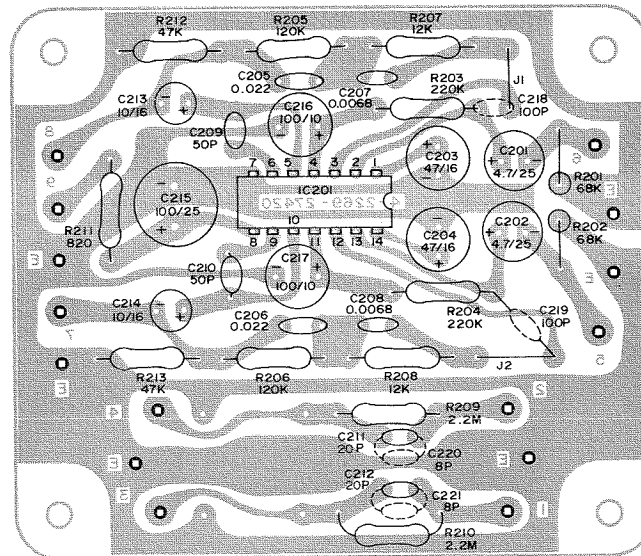
Ref. No.	Part No.	Description
EQUALIZER PCB ASSEMBLY PB1310400169301		
70	PB1310400169301	Pre-Amp PCB Assy.
C216,217	CE0252331	Capacitor, Elect. 100mF, 10V
C201,202	CS22340-6	Capacitor, Elect. 4.7mF, 25V
C213,214	CE1252621	Capacitor, Elect. 10mF, 16V
C203,204	CE22342-8	Capacitor, Elect. 47mF, 16V
C215	CE22342-11	Capacitor, Elect. 100mF, 25V
C211,212	CK0246447	Capacitor, Ceramic 20pF, 50V
C218,219	CK22347-1	Capacitor, Ceramic 100pF, 50V
C209,210	CK0242011	Capacitor, Ceramic 50pF, 50V
C205,206	CY22335-12	Capacitor, Mylar 0.022mF, 50V

Ref. No.	Part No.	Description
EQUALIZER PCB ASSEMBLY PB1310400169301		
C207,208	CY22335-9	Capacitor, Mylar .0068mF, 50V
R207,208	RF25DC123J	Resistor 12K ohm 1/4W 5%
R205,206	RF25DC124J	Resistor 120K ohm 1/4W 5%
R203,204	RF25DC224J	Resistor 220K ohm 1/4W 5%
R209,210	RF25DC225J	Resistor 2.2M ohm 1/4W 5%
R212,213	RF25DC473J	Resistor 27K ohm 1/4W 5%
R211	RF25DC821J	Resistor 820 ohm 1/4W 5%
R201,202	RF25DC683J	Resistor 68K ohm 1/4W 5%
IC201	TRLA3122	IC LA3122

EQUALIZER PCB BOTTOM VIEW PB1310400169301



EQUALIZER PCB TOP VIEW PB1310400169301

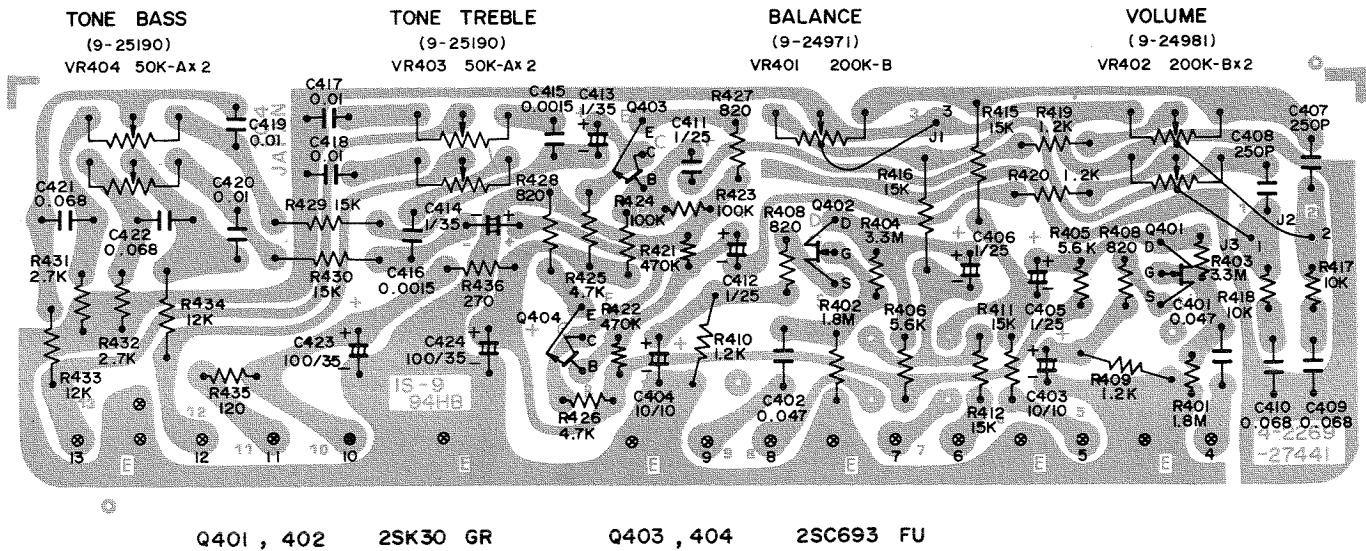


IC201 LA3122

PARTS LIST

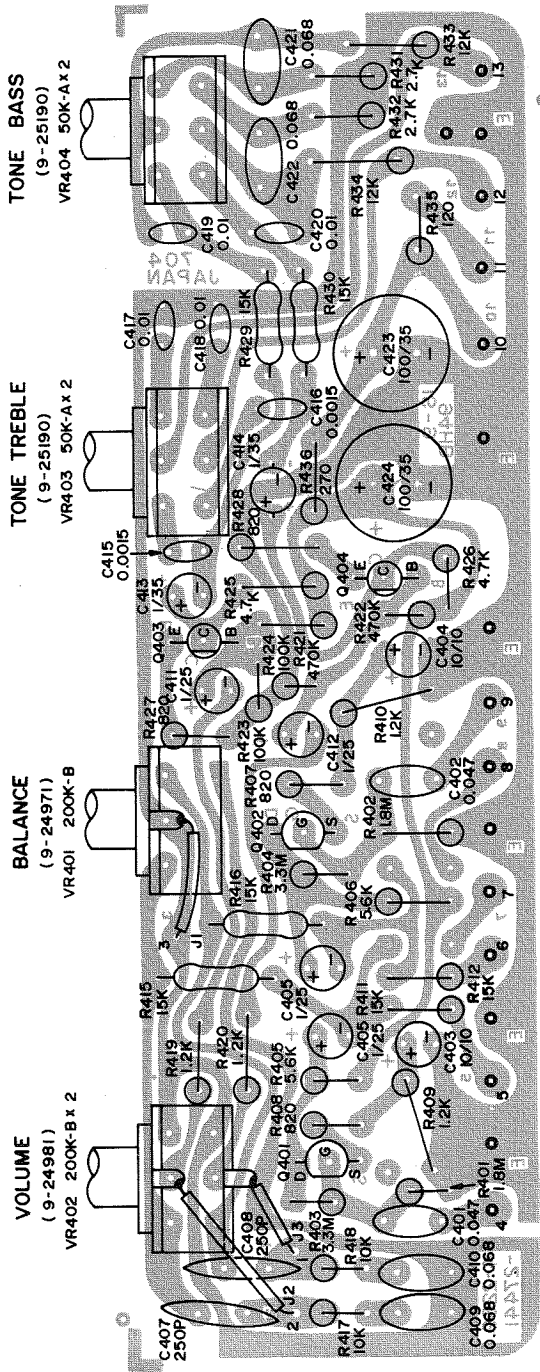
Ref. No.	Part No.	Description
TONE CONTROL PCB ASSEMBLY PB1310400169201		
71	PB1310400169201	PCB Tone Control
VR401	RP42229249710	Balance Control B-200K
VR402	RP42229249810	Volume Control B-200K Dual
VR403,404	RP42229251900	Bass, Treble Control A50K Dual
C403,404	CECDV10/10	Capacitor, Elect. 10mF, 10V
C407,408	CK22350-5	Capacitor, Ceramic 250pF, 50V
C405,406,411,412	CS22340-5	Capacitor, Alsicon 1mF, 25V
C417,418,419,420	CY22335-1	Capacitor, Mylar 0.01mF, 50V
C415,416	CY22335-24	Capacitor, Mylar 0.0015mF, 50V
C401,402	CY22335-22	Capacitor, Mylar 0.047mF, 50V
C421,422,409,410	CY22335-16	Capacitor, Mylar 0.068mF, 50V
C413,414	CE22342-2	Capacitor, Elect. 1mF, 50V
C423,424	CE22342-10	Capacitor, Elect. 100mF, 35V
R415,416,429,430	RF25DC153J	Resistor 15K ohm 1/4W 5%
R427,428	RF25DC102J	Resistor 1K ohm 1/4W 5%
R417,418	RF25DC103J	Resistor 10K ohm 1/4W 5%
R423,424	RF25DC104J	Resistor 100K ohm 1/4W 5%
R401,402	RF25DC105J	Resistor 1M ohm 1/4W 5%
R409,410,419,420	RF25DC122J	Resistor 1.2K ohm 1/4W 5%
R433,434	RF25DC123J	Resistor 12K ohm 1/4W 5%
R411,412	RF25DC153J	Resistor 15K ohm 1/4W 5%
R436	RF25DC271J	Resistor 270 ohm 1/4W 5%
R431,432	RF25DC272J	Resistor 2.7K ohm 1/4W 5%
R413,414	RF25DC332J	Resistor 3.3K ohm 1/4W 5%
R425,426	RF25DC472J	Resistor 4.7K ohm 1/4W 5%
R421,422	RF25DC474J	Resistor 470K ohm 1/4W 5%
R403,404	RF25DC475J	Resistor 4.7M ohm 1/4W 5%
R407,408,435	RF25DC821J	Resistor 820 ohm 1/4W 5%
R405,406	RF25DC822J	Resistor 8.2K ohm 1/4W 5%
Q401,402	TR2SK30GR	Transistor FET 2SK30GR
Q403,404	TR2SC693F-U	Transistor 2SC693F-U

TONE PCB BOTTOM VIEW PB1310400169201



Q401 , 402 2SK30 GR Q403 , 404 2SC693 FU

TONE PCB TOP VIEW PB1310400169201

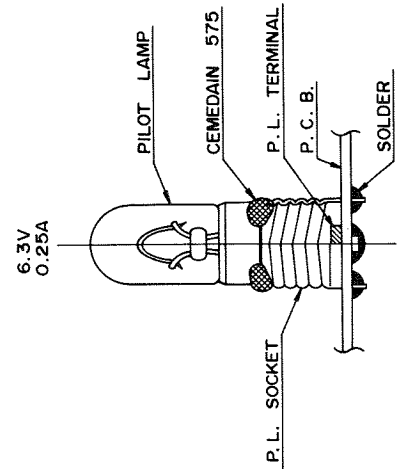
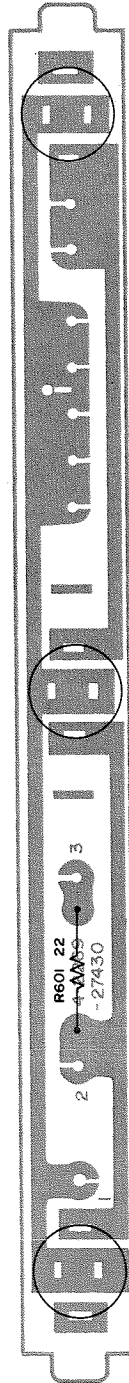


Q401, 402 2SK30 GR . Q403, 404 2SC693 FU

PARTS LIST

Ref. No.	Part No.	Description
DIAL LAMP PCB ASSEMBLY PB1310400165401		
72	PB1310400165401	Dial Lamp PCB Assy.
	4235921290	Socket, Lamp
	4237920950	Terminal, Socket
	LM4612920100	Lamp 6.3V 25mA, Screw Type
R601	RC20BF221J	Resistor, 220 ohm, 1/2W 5%

LAMP PCB BOTTOM VIEW PB1310400165401

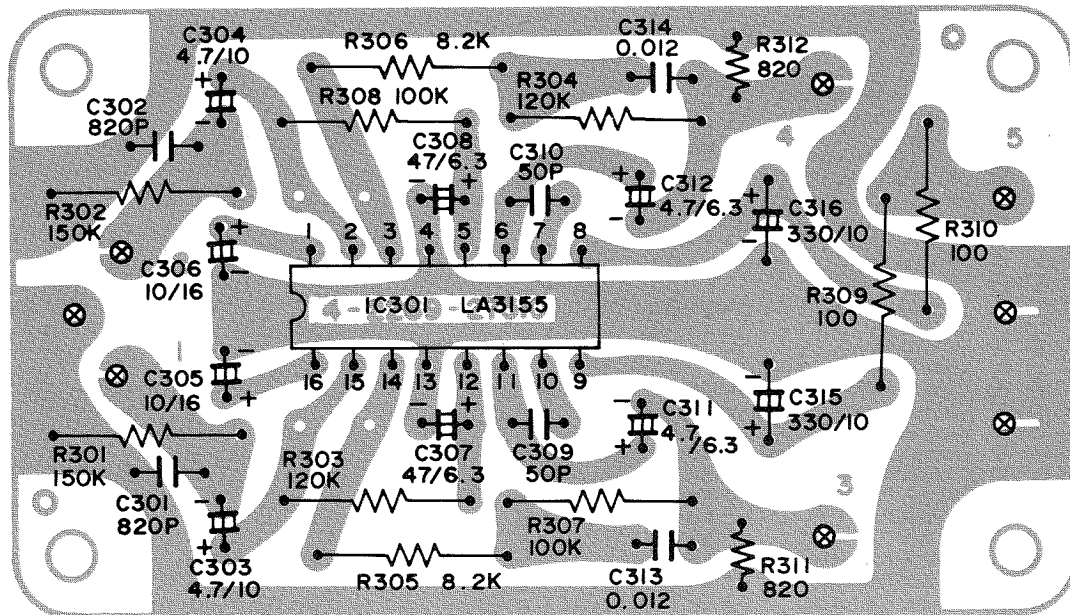


PARTS LIST

Ref. No.	Part No.	Description
8 TRACK PLAYBACK EQUALIZATION ASSEMBLY PB1310400170200		
	PB1310400170200	Tape Playback Equalization P.C.B. Ass'y.
C301,302	CK22347-11	Capacitor, Ceramic, 820pF, 50V
C303,304	CS22340-6	Capacitor Sintered Alum. 4.7mF, 10V
C305,306	CE1252521	Capacitor, Elect. 10mF, 16V
C307,308	CE0252225	Capacitor, Elect. 47mF, 6.3V
C309,310	CK22344-23	Capacitor, Ceramic 50pF, 50V
C311,312	CE1252615	Capacitor, Elect. 4.7mF, 6.3V
C313,314	CY22335-10	Capacitor, Mylar 0.012mF, 50V

Ref. No.	Part No.	Description
8 TRACK PLAYBACK EQUALIZATION ASSEMBLY PB1310400170200		
C315,316	CE22342-18	Capacitor, Elect. 330mF, 10V
R301,302	RF25DC154J	Resistor, 150K, 1/4W 5%
R303,304	RF25DC124J	Resistor, 120K, 1/4W 5%
R305,306	RF25DC822J	Resistor, 8.2K, 1/4W 5%
R307,308	RF25DC104J	Resistor, 100K, 1/4W 5%
R309,310	RF25DC101J	Resistor, 100 ohm, 1/4W 5%
R311,312	RF25DC821J	Resistor, 820 ohm, 1/4W 5%
IC301	TRLA3155	Integrated circuit, ICLA3155

8 TRACK EQUALIZATION PCB BOTTOM VIEW PB1310400170200

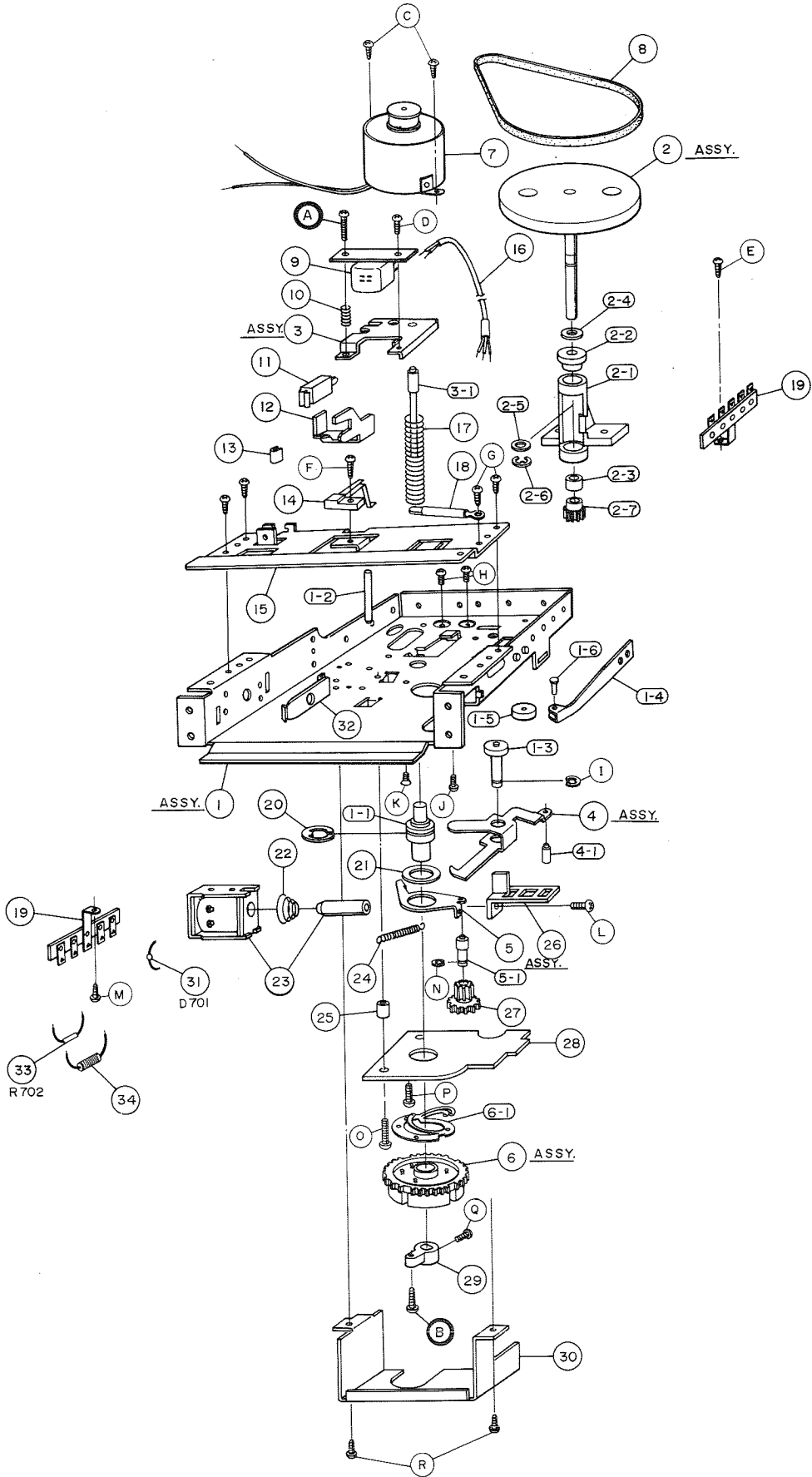


PARTS LIST

Ref. No.	Part No.	Description
8 TRACK TAPE DECK ASSEMBLY PARTS		
*1	131 0 3807 00100	Chassis Assembly, 8 Track
(1-1 to 1-6)		
2	131 0 3808 00110	Flywheel Capstan Assembly
(2-1 to 2-7)		
3 (3-1)	131 0 3804 00120	Base Head Assembly
4 (4-1)	131 0 3806 00140	Lever Stop Assembly
5 (5-1)	131 0 3806 00130	Gear Arm Assembly
6 (6-1)	131 0 3803 00120	Gear Cam Assembly
7	4 5269 29004	Motor, D.C.
8	131 2 4804 00120	Drive Belt
9	4 2429 20070	Tape Playback Head
10	131 2 5801 00220	Spring, Azimuth
11	131 24802 00120	Sensor
12	131 2 3807 00110	Tape Guide
13	141 2 4469 08800	Pad, Tape
14 (S4)	4 2319 71280	Switch, Leaf
*15	131 2 3802 00120	Bridge
*16	335 3 0203 10000	Wire Assembly
17	131 2 5801 00210	Spring, Head Base
*18	131 0 3016 10400	Wire Clamp Assembly
*19	4 2379 20121	Terminal Lug, 4 Point
*20	108 3 1110 00000	E-Ring 10mm, Main Boss
21	131 2 4809 00180	Washer
22	131 2 5801 00230	Spring, Solenoid Plunger
23	131 0 4008 00301	Solenoid Assembly
24	131 2 5801 00260	Spring, Gear Arm
25	131 2 4208 21200	Spacer
26	131 2 3815 00110	Stopper, Plunger
27	131 2 3822 00110	Planetary Gear
28 (S5)	4 2269 27090	Contact P.C.B.
29	131 2 3811 00120	Head Base Adjustment Cam
*30	131 2 1413 700	Cover
31 (D701)	TRF14K	Diode, F-14K
32	131 2 3803 00120	Guide
33 (R702)	RC20BF6R8J	Resistor, Carbon, 6.8 ohm, 1/2W, 10%
34	4 2539 202100	Choke Coil
A	131 2 4808 00140	Screw, Azimuth
B	131 2 4808 00120	Screw, Head Base Adjustment
*C	102 3 2203 01202	Screw, Button Head Tapping 3 x 12
*D	101 3 1103 00603	Screw, Pan Head 3 x 6
*E	102 3 1203 00602	Screw, Pan Head Tapping
*F	102 3 1202 60600	Screw, Pan Head Tapping
*G	102 3 1203 00602	Screw, Pan Head Tapping 3 x 6
*H	101 3 1103 00401	Screw, Pan Head 3 x 4
*I	108 3 1103 00000	Ring E 3mm
*J	101 3 1103 00603	Screw, Pan Head 3 x 6
*K	101 3 1203 00604	Screw, Flat Head 3 x 6
*L	101 3 1103 00603	Screw, Pan Head 3 x 6
*M	102 3 1203 00602	Screw, Pan Head Tapping
*N	108 3 1102 00000	Ring E, 2mm
*O	101 3 1103 01201	Screw, Pan Head 3 x 12
*P	101 3 1103 00603	Screw, Pan Head 3 x 6
*Q	101 3 1102 60603	Screw, Pan Head 2.6 x 6
*R	102 3 1203 00602	Screw, Pan Head Tapping 3 x 6

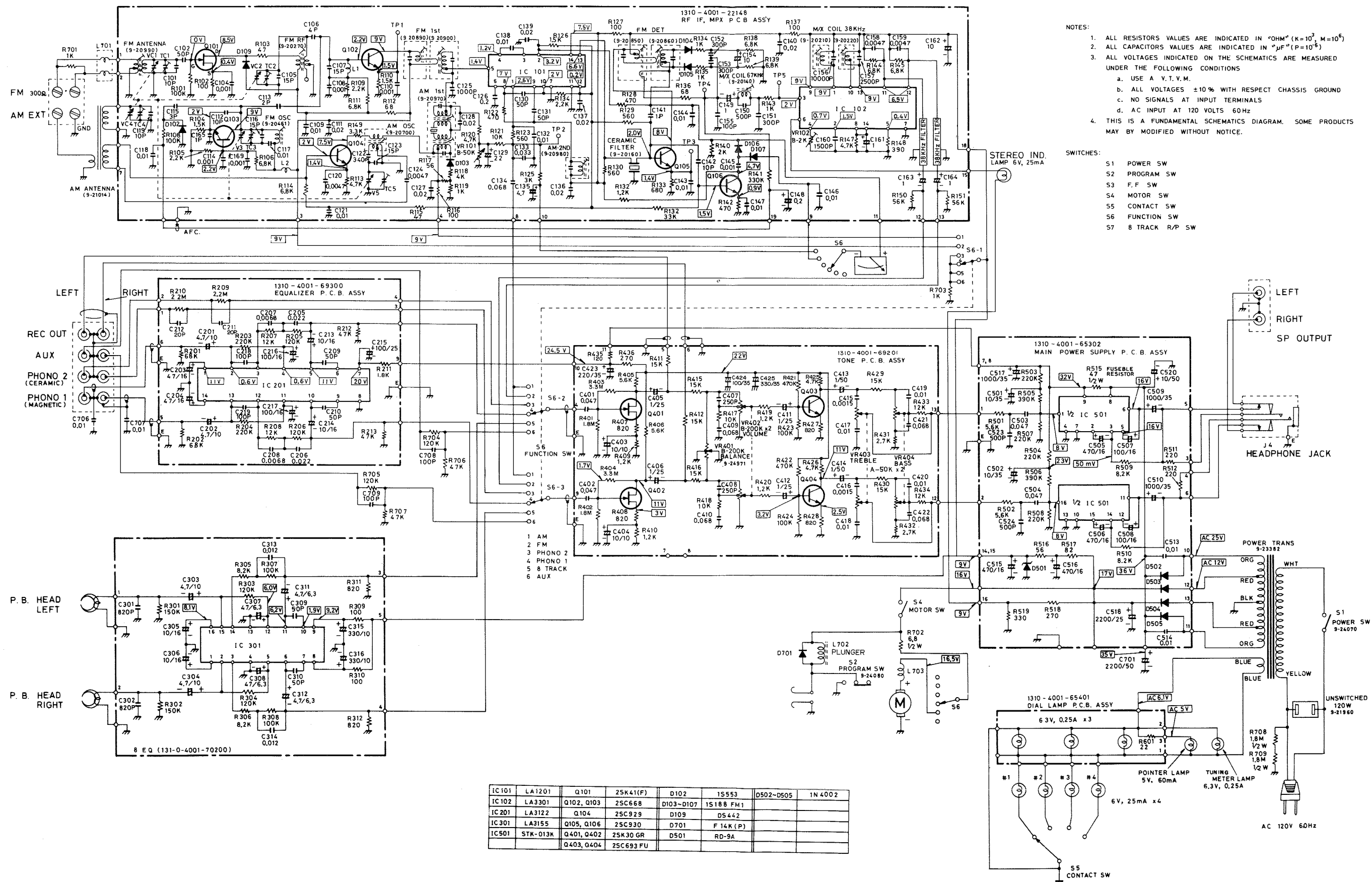
*NOT A SERVICE PART

8 TRACK TAPE DECK EXPLODED VIEW

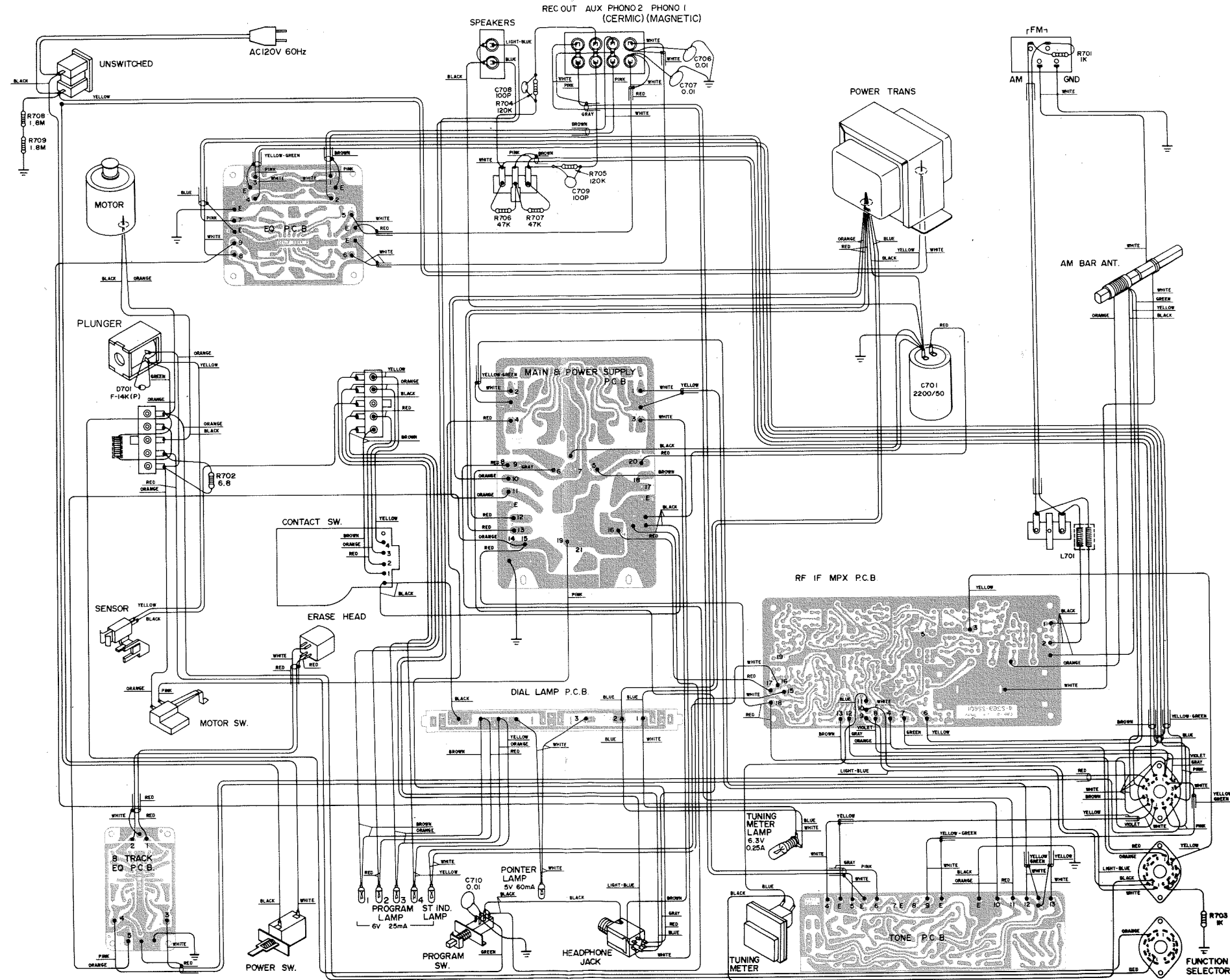


NOTES

SCHEMATIC DIAGRAM



WIRING DIAGRAM



FISHER CORPORATION 11-40 45th ROAD • LONG ISLAND CITY • NEW YORK 11101