




AM-FM-MPX ALIGNMENT PROCEDURE

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 (400Hz, 30% modulation)	Near 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.

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 0.01µF.	Connect oscilloscope to test point TP3.	10.7 MHz (no modulation)	Near max. capacity of VC. at position with no signal.	FM 1st 9-20890 (Violet) 9-20900 (Orange) FM 2nd C.F. 9-20160 (Non adj.)	
2	Ratio Det		Connect oscilloscope to test point TP4.			FM DET 9-20850 (Pink) 9-20860 (Blue)	
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 RF 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.	Near 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 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 R speaker terminal.		38KHz 9-20210 (Black)	Min.
4			Connect V.T.V.M. to L speaker terminal.			Min.
5	Repeat steps 3 - 4. Set at position with max. channel separation.					

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

**PARTS LIST**

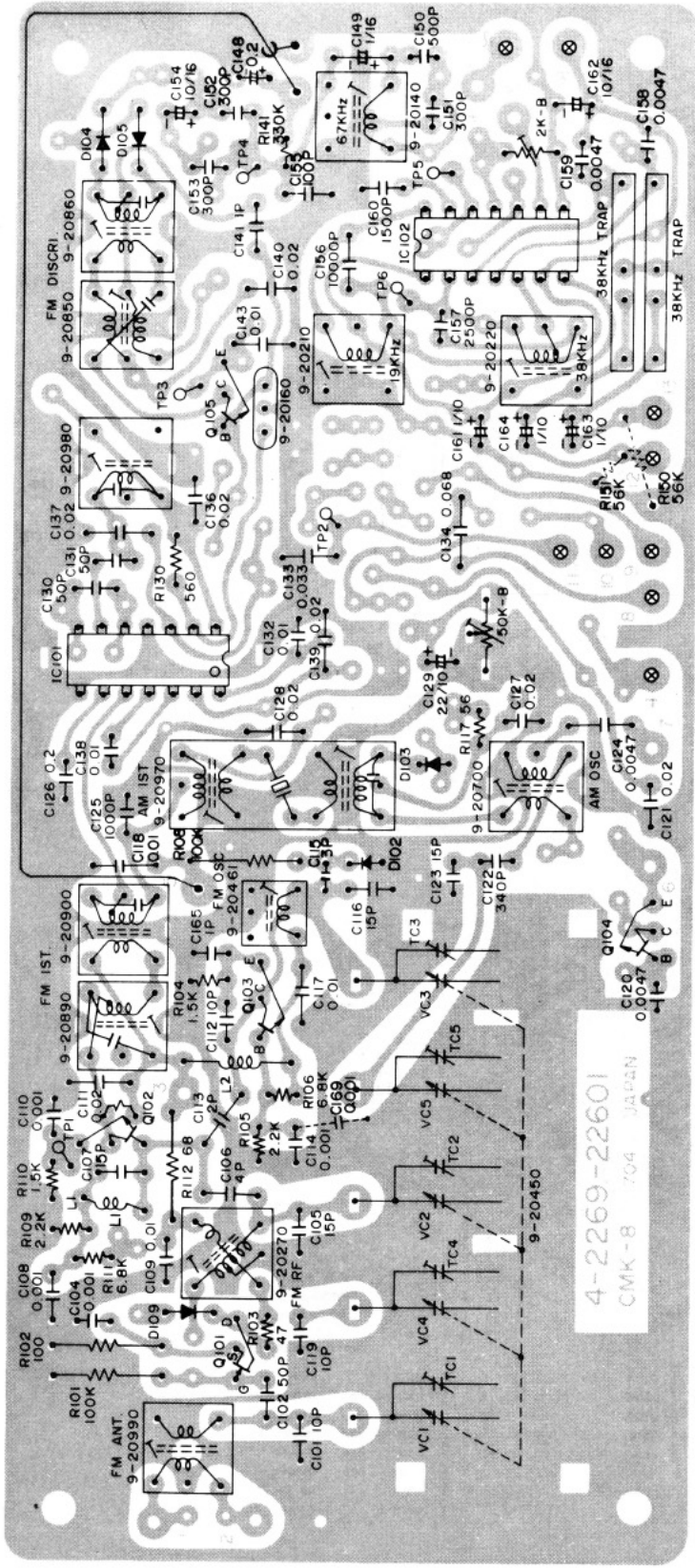
Ref. No.	Part No.	Description
<b>RF, IF, MPX PCB ASSY PB1310400122147</b>		
81*	PB1310400122147	RF, IF, MPX PCB Assy
VR101	RP4222921810	Potentiometer 50K-B IC Bias
VR102	RP4222922760	Potentiometer 2K-B
920450	CV4224920450	Variable Capacitor, Tuning Gang
	PC4227920140	Packaged Circuit 38KHz Filter
920160	ZK4227920160	Ceramic Filter 10.7KHz
L2	LC4253920120	IF Trap Coil
L1	LC4253920130	RF Filter Choke Coil
920850	ZZ4256920850	IF Transformer, FM
920860	ZZ4256920860	IF Transformer, FM
920890	ZZ4256920890	IF Transformer, FM
920900	ZZ4256920900	IF Transformer, FM
920970	ZZ4256920970	IF Transformer, AM
920980	ZZ4256920980	IF Transformer, AM
920990	LC4257920990	Antenna Coil, FM
920461	LC4258920461	FM Osc. Coil
920700	LC4258920700	AM Osc. Coil
920270	LC4259920270	RF Coil FM
920140	LC4265920140	Multiplex Coil
920210	LC4265920210	Multiplex Coil 19KHz
920220	LC4265920220	Multiplex Coil 38KHz
C163,164	CS22340-5	Capacitor, Sintered Alum. 1MF 10V
C148	CL22305-8	Capacitor, Tantalum 0.2MF 10V
C126	C1BBDZ204TY	Capacitor, Semiconductor 0.2MF 12V
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	CK0245018	Capacitor, Ceramic .02MF 50V
C169	CK22349-4	Capacitor, Ceramic .001MF 50V
C138	CK22349-1	Capacitor, Ceramic .01MF 50V
C121,128,136,137,139,140,143,127	CK0245018	Capacitor, Ceramic .02MF 50V
C113	CK22346-3	Capacitor, Ceramic 2pF 50V
C141,165	CK0248641	Capacitor, Ceramic 1pF 50V
C115	CK22345-1	Capacitor, Ceramic 3pF 50V
C106	CK22346-5	Capacitor, Ceramic 4pF 50V
C112	CK22344-22	Capacitor, Ceramic 10pF 50V
C101,119	CK22345-3	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 1000pF 50V
C160	CP0217813	Capacitor, Styrol 1500pF 50V
C157	C1VSEK252A	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	RF25DC561J	Resistor 560 ohm 1/4W 5%
R150,151	RF25DC563J	Resistor 56K ohm 1/4W 5%
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%

Ref No.	Part No.	Description
<b>RF, IF, MPX PCB ASSY PB1310400122147</b>		
R112	RF25DC680J	Resistor 68 ohm 1/4W 5%
R190	RF25DC223J	Resistor 22K 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	RF25DC473J	Resistor 47K 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	RF25DC471J	Resistor 470 ohm 1/4W 5%
R121	RF25DC103J	Resistor 10K ohm 1/4W 5%
R123	RF25DC561J	Resistor 560 ohm 1/4W 5%
R124	RF25DC222J	Resistor 2.2K ohm 1/4W 5%
R126	RF25DC152J	Resistor 1.5K ohm 1/4W 5%
R127	RF25DC101J	Resistor 100 ohm 1/4W 5%
R129	RF25DC561J	Resistor 560 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	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	TR2SC930E	Transistor, 2SC930E
Q101	TR2SK41F	Transistor, 2SK41F
IC101	TRLA1201	IC, LA1201
IC102	TRLK3301	IC, LA3301

\* Not a Service Part.

RF, IF, MPX P.C.B. BOTTOM VIEW PB1310400122147

CLASSIFICATION	Q101	Q102	Q103	Q104	Q105	D102	D103-D105	D109	IC101	IC102
TR	2SK41 F	2SC668R D, E	2SC668R D	2SC929 E, D	2SC930 D, E	IS553	IS188 FM1	DS-442	LA1201	LA3301



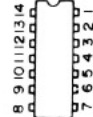
TRANSISTOR BOTTOM VIEW



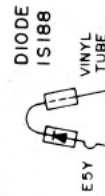
FET  
2SK41



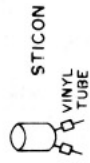
TR  
2SC668



IC  
LA1201  
LA3301



DIODE  
IS188



STICON  
VINYL  
TUBE

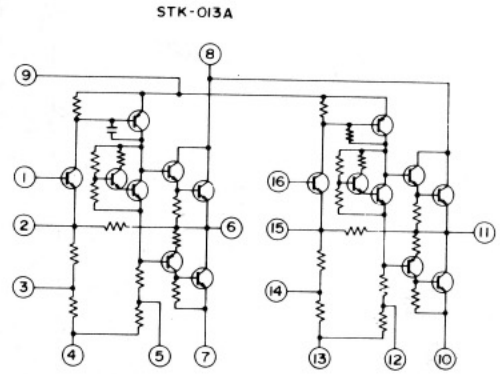
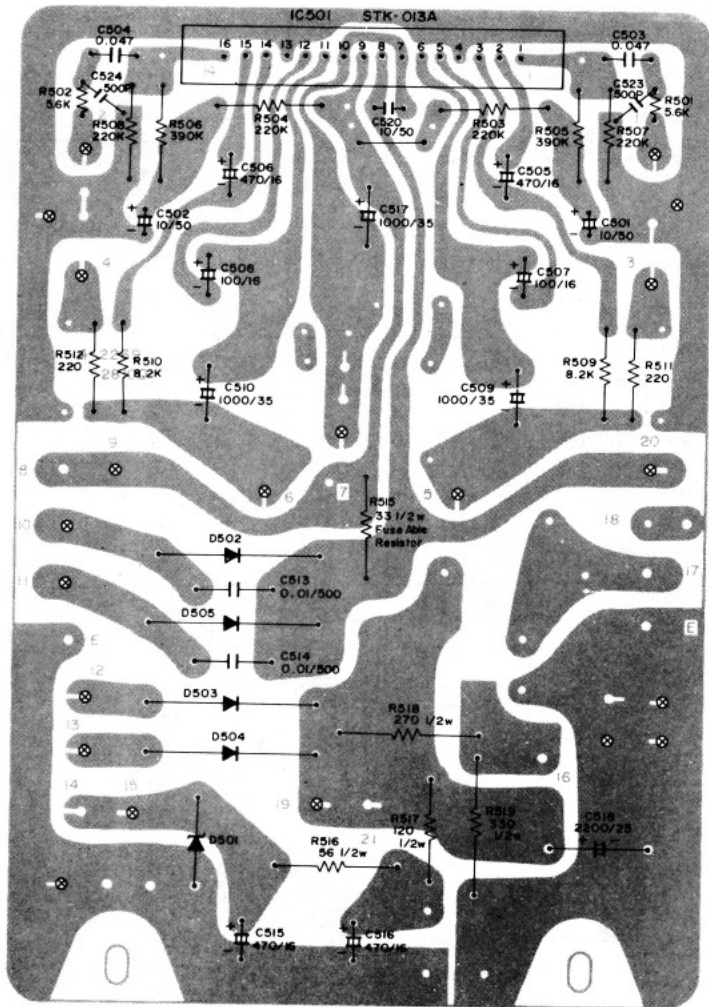
TERMINAL NO	TERMINAL NO
1, 2	FM ANT
3	FM +B
4	AM +B
5, 19	AFC
6, 7	AM ANT
8	AM OUT
9, 10, 11	TV METER
	FM OUT (R)
	FM OUT (L)
	STEREO IND.
	INDICATOR +B
	+B (9V)

Ref. No.	Part No.	Description
<b>MAIN POWER SUPPLY PCB ASSY PB1310400165301</b>		
82*	PB1310400165301	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	CE22342-3	Capacitor, Elect. 10MF 50V
C503,504	C1HBDM473A	Semiconductor .047MF 50V
C509,510,517	CD-V1000/35	Capacitor, Elect. 1000MF 35V
C513,514	C2HYSYP103A	Capacitor Ceramic 0.01MF 500V
C520	CE22342-3	Cap. Elect. 10MF 50V
C523,524	C1HYDK501R--	Cap. Ceramic 500pF 50V
D502,503,504,505	TR1N4002	Diode 1N4002

Ref. No.	Part No.	Description
<b>MAIN POWER SUPPLY PCB ASSY PB1310400165301</b>		
D501	TRRD9.1E	Diode RD9.1E
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	R2HZPK330A	Resistor 33 ohm 1/2W 10%
R516	RC20BF560J	Resistor 56 ohm 1/2W 5%
R517	RC20BF121J	Resistor 120 ohm 1/2W 5%
IC501	TRSTK013K	IC STK013K

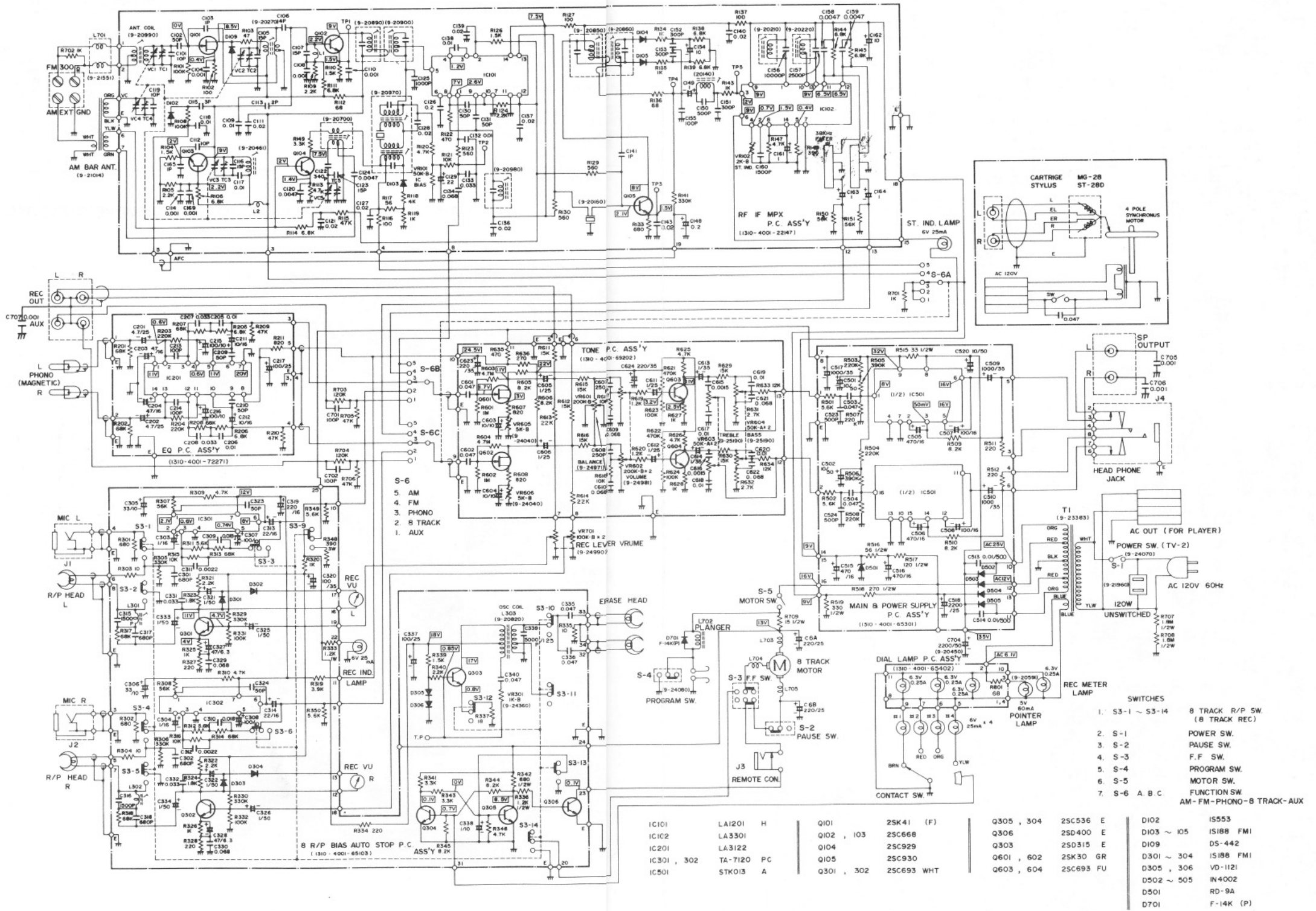
\*Not a Service part.

### MAIN POWER SUPPLY P.C.B. BOTTOM VIEW PB1310400165301

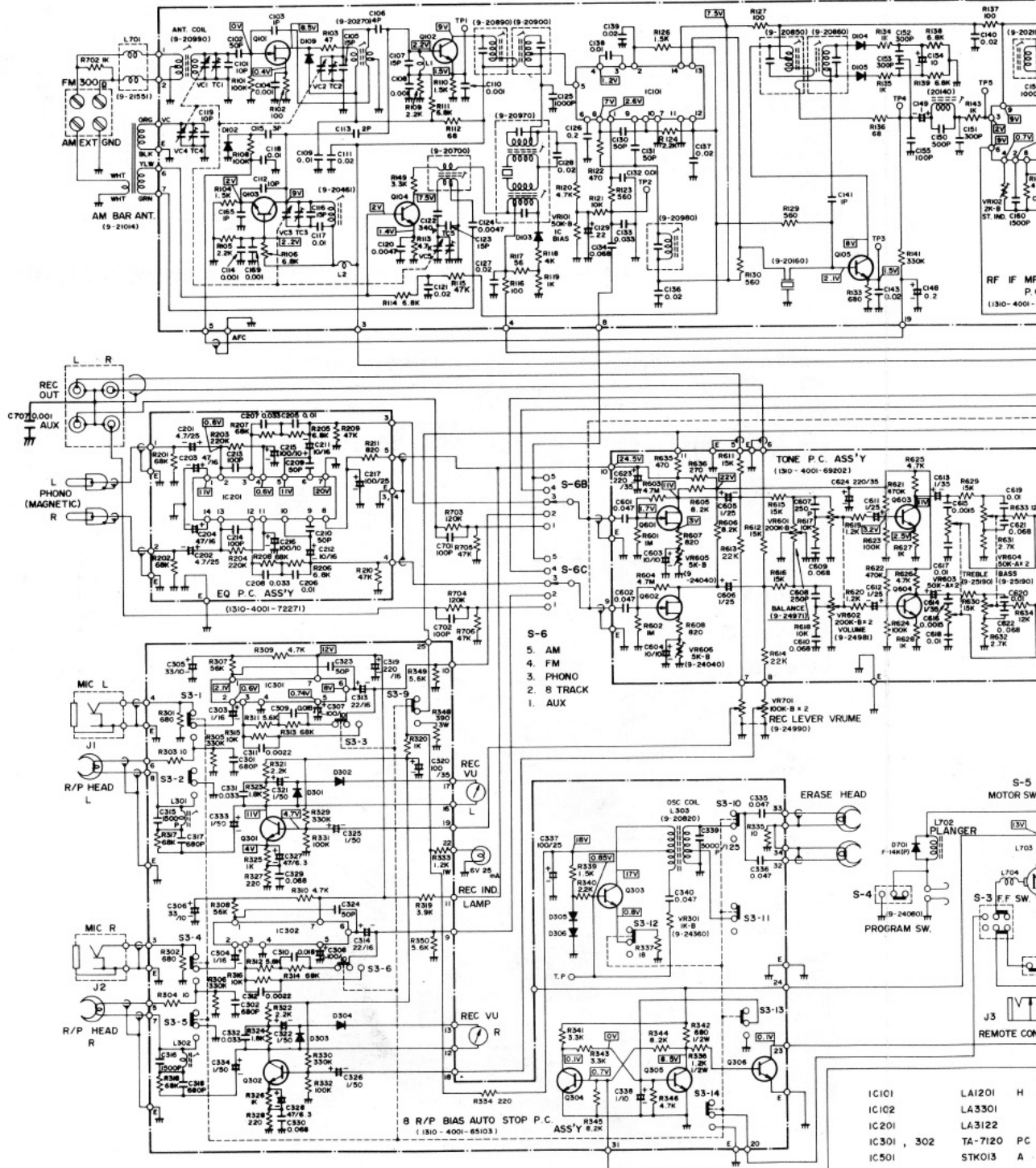


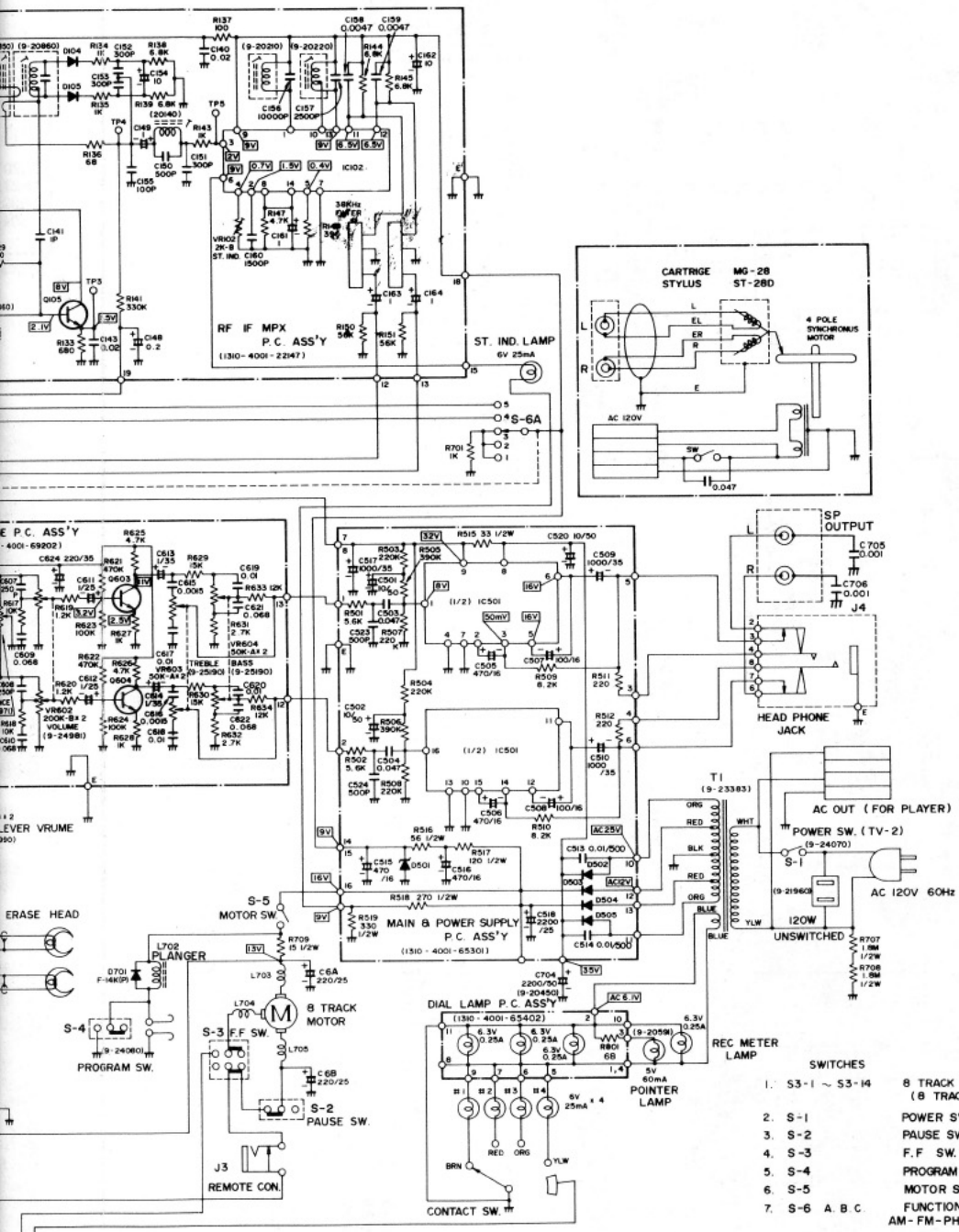
D501 RD-9E · D502 ~ 505 1N4002

# Fisher MC-3015



# Fisher MC-3015





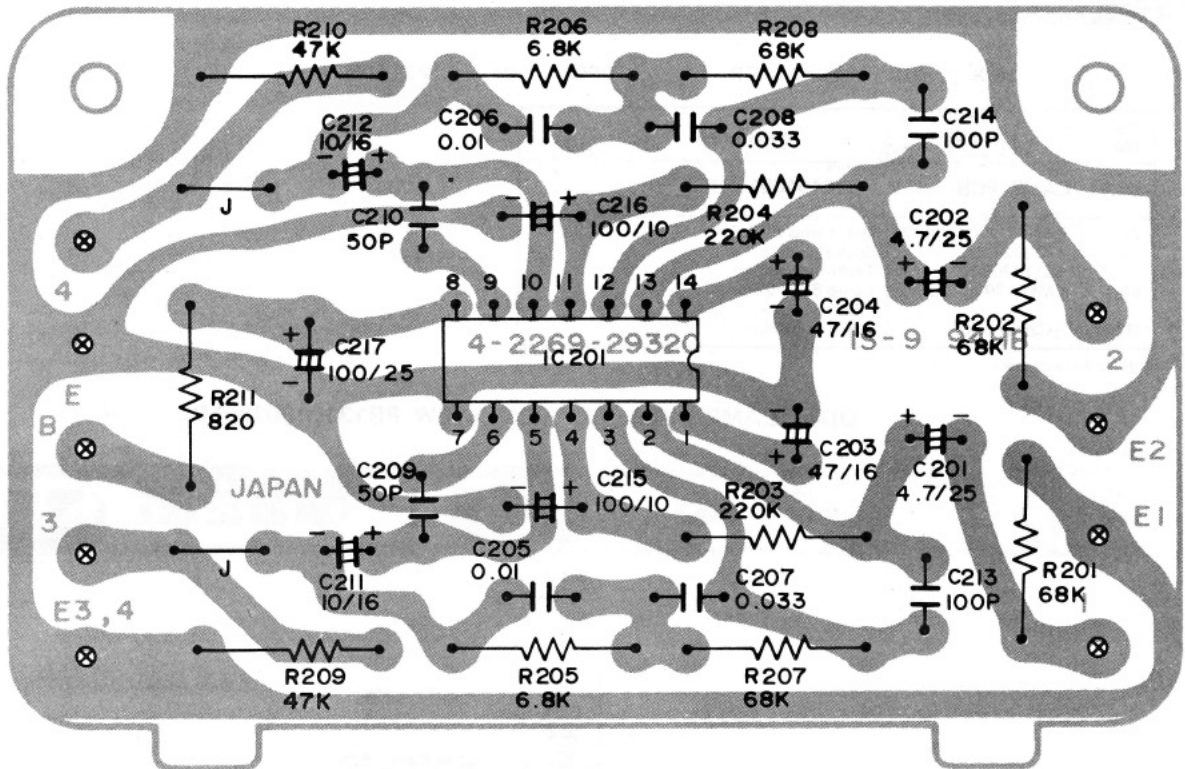
IC101	LA1201	H	Q101	25K41	(F)	Q305, 304	25C536	E	D102	IS553
IC102	LA3301		Q102, 103	25C668		Q306	25D400	E	D103 ~ 105	IS188 FMI
IC201	LA3122		Q104	25C929		Q303	25D315	E	D109	DS-442
IC301, 302	TA-7120	PC	Q105	25C930		Q601, 602	25K30	GR	D301 ~ 304	IS188 FMI
IC501	STK013	A	Q301, 302	25C693	WHT	Q603, 604	25C693	FU	D305, 306	VD-1121
									D502 ~ 505	IN4002
									D501	RD-9A
									D701	F-14K (P)

- SWITCHES**
- 1. S3-1 ~ S3-14 8 TRACK R/P SW. (8 TRACK REC)
  - 2. S-1 POWER SW.
  - 3. S-2 PAUSE SW.
  - 4. S-3 F.F. SW.
  - 5. S-4 PROGRAM SW.
  - 6. S-5 MOTOR SW.
  - 7. S-6 A B C FUNCTION SW. AM-FM-PHONO-8 TRACK-AUX

PARTS LIST

Ref. No.	Part No.	Description
<b>EQUALIZER PCB ASSY PB1310400172271</b>		
84	PB1310400172271	Equalizer PCB Assy
C215,216	CE0252331	Capacitor, Elect. 100MF 10V
C201,202	CS22340-6	Capacitor, Elect. 4.7MF 25V
C213,214	CK22347-1	Capacitor, Ceramic 100pF 50V
C203,204	CE22342-8	Capacitor, Elect. 47MF 16V
C217	CE22342-11	Capacitor, Elect. 100MF 25V
C211,212	CE1252621	Capacitor, Elect. 10MF 16V
C209,210	CK0242011	Capacitor, Ceramic 50pF 50V
C205,206	CY22335-1	Capacitor, Mylar 0.01MF 50V
C207,208	CY22335-7	Capacitor, Mylar 0.033MF 50V
R207,208	RF25DC683J	Resistor 68K ohm 1/4W 5%
R205,206	RF25DC682J	Resistor 6.8K ohm 1/4W 5%
R203,204	RF25DC224J	Resistor 220K ohm 1/4W 5%
R209,210	RF25DC473J	Resistor 47K 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 P.C.B. BOTTOM VIEW PB1310400172271



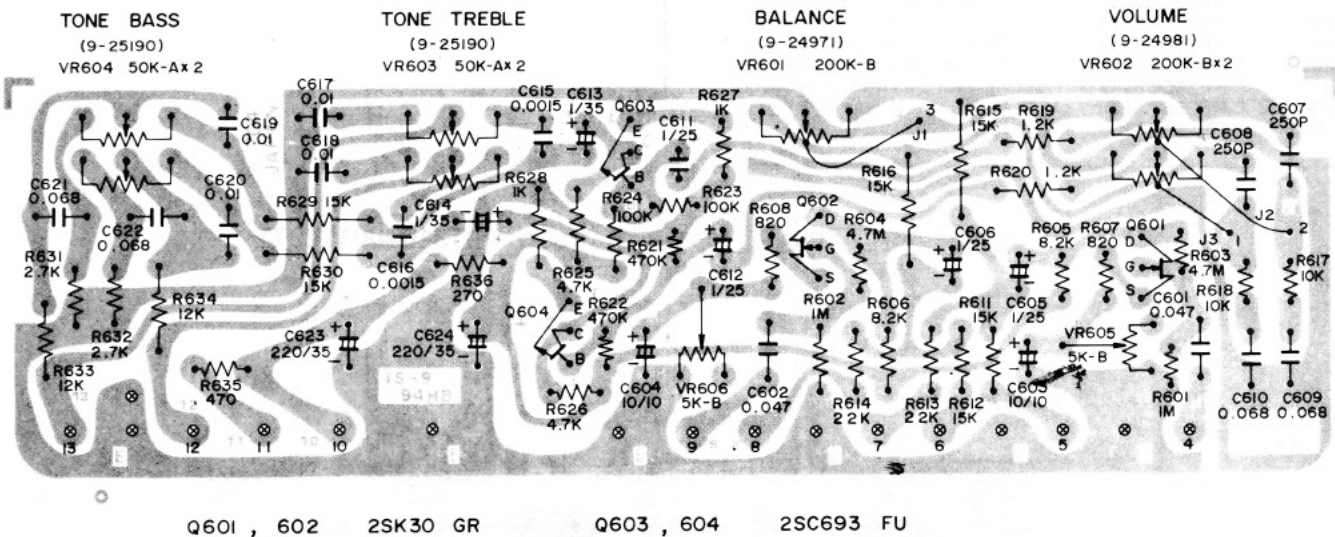
IC201 LA3122



Ref. No.	Part No.	Description
<b>TONE CONTROL PCB ASSY PB1310400169202</b>		
83	PB1310400169202	PCB Control
VR601	RP4222924971	Balance Control B-200K
VR602	RP4222924981	Volume Control B-200K x 2
VR603,604	RP4222925190	Bass, Treble Control A-50K x 2
C603,604	CECDV10/10	Capacitor, Elect. 10MF 10V
C607,608	CKC1HCSK251SL	Capacitor, Ceramic 250pF 50V
C605,606,611,612	CEC1EUBX105A	Capacitor, Alisicon 1MF25V
C617,618,619,620	CY22335-1	Capacitor, Mylar 0.01MF 50V
C615,616	CY22335-24	Capacitor, Mylar 0.0015MF 50V
C601,602	CY22335-22	Capacitor, Mylar 0.047MF 50V
C621,622,609,610	CY22335-16	Capacitor, Mylar 0.068MF 50V
C613,614	CE22342-2	Capacitor, Elect. 1MF 50V
C623,624	CE22342-20	Capacitor, Elect. 220MF 35V
R615,616,629,630	RF25DC153J	Resistor 15K ohm 1/4W 5%
R627,628	RF25DC102J	Resistor 1K ohm 1/4W 5%

Ref. No.	Part No.	Description
<b>TONE CONTROL PCY ASSY PB1310400169202</b>		
R617,618	RF25DC103J	Resistor 10K ohm 1/4W 5%
R623,624	RF25DC104J	Resistor 100K ohm 1/4W 5%
R601,602	RF25DC105J	Resistor 1M ohm 1/4W 5%
R619,620	RF25DC122J	Resistor 1.2K ohm 1/4W 5%
R633,634	RF25DC123J	Resistor 12K ohm 1/4W 5%
R611,612	RF25DC153J	Resistor 15K ohm 1/4W 5%
R636	RF25DC271J	Resistor 270 ohm 1/4W 5%
R631,632	RF25DC272J	Resistor 2.7K ohm 1/4W 5%
R613,614	RF25DC223J	Resistor 22K ohm 1/4W 5%
R625,626	RF25DC472J	Resistor 4.7K ohm 1/4W 5%
R621,622	RF25DC474J	Resistor 47K ohm 1/4W 5%
R603,604	RF25DC475J	Resistor 4.7M ohm 1/4W 5%
R635	RF25DC471J	Resistor 470 ohm 1/4W 5%
R607,608	RF25DC821J	Resistor 820 ohm 1/4W 5%
R605,606	RF25DC822J	Resistor 8.2K ohm 1/4W 5%
Q601,602	TR2SK30GR	Transistor FET 2SK30GR
Q603,604	TR2SC693F-U	Transistor 2SC693
VR605,606	4222924040	Var. Resistor Bias Adj. 5K

**TONE CONTROL P.C.B. BOTTOM VIEW PB1310400169202**

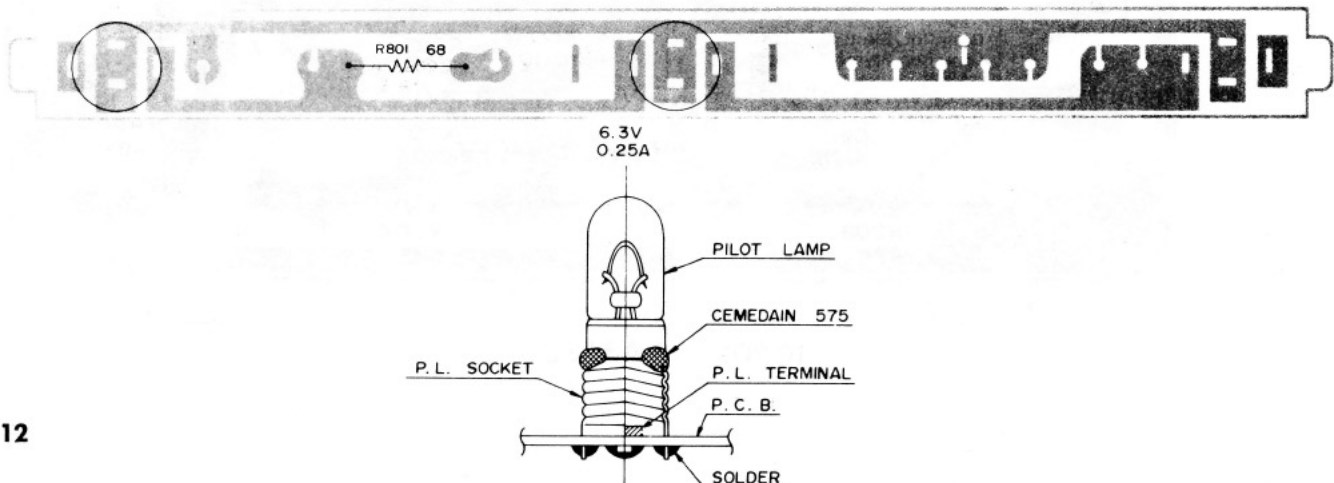


Q601, 602 2SK30 GR      Q603, 604 2SC693 FU

Ref. No.	Part No.	Description
<b>DIAL LAMP PCB ASSY PB1310400165402</b>		
85*	PB1310400165402	Dial Lamp PCB Assy
	4235921290	Socket, Lamp
	4237920950	Terminal, Socket
85-1	LM4612920100	Lamp 6.3V 25mA, Screw Type
R801	RC20BF680J	Resistor 68 ohm 1/2W 5%

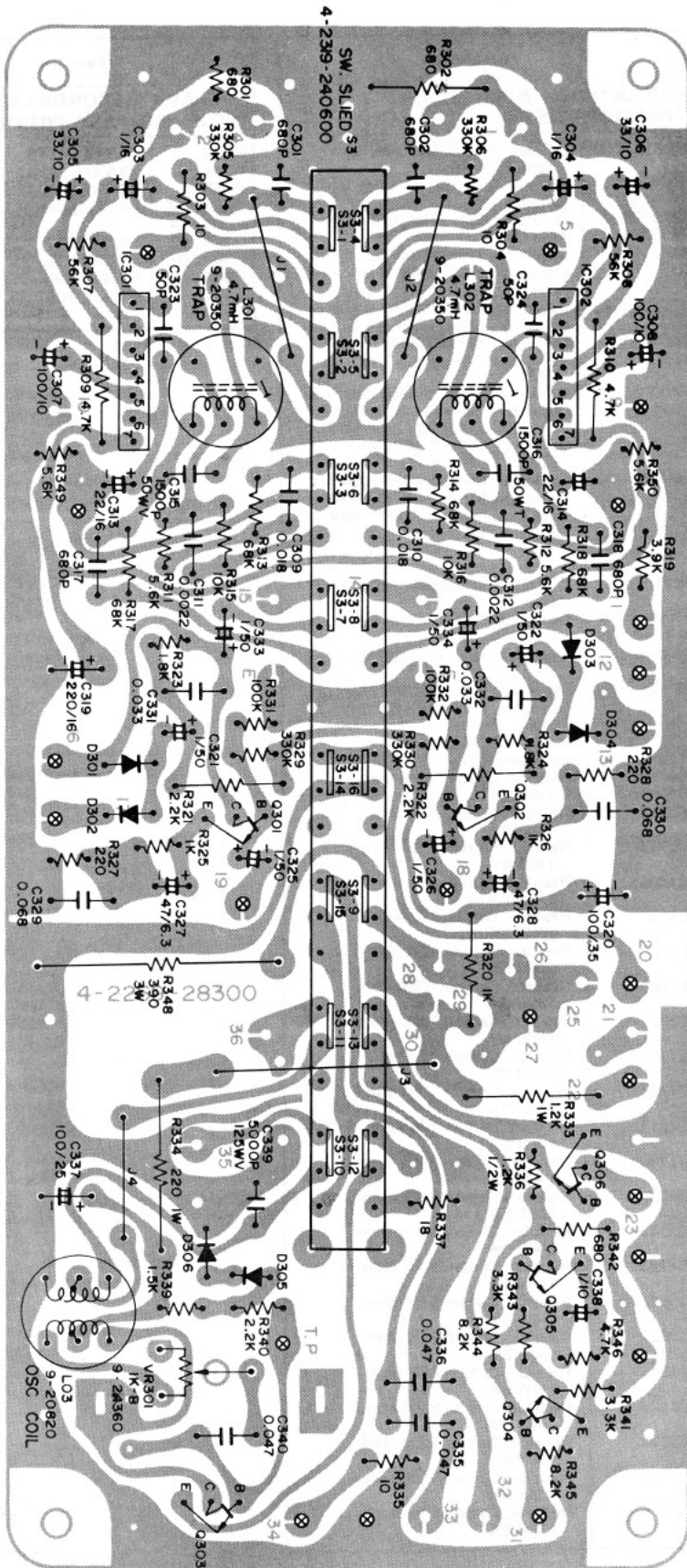
\* Not a Service part.

**DIAL LAMP P.C.B. BOTTOM VIEW PB1310400165402**

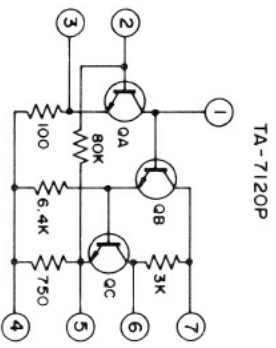


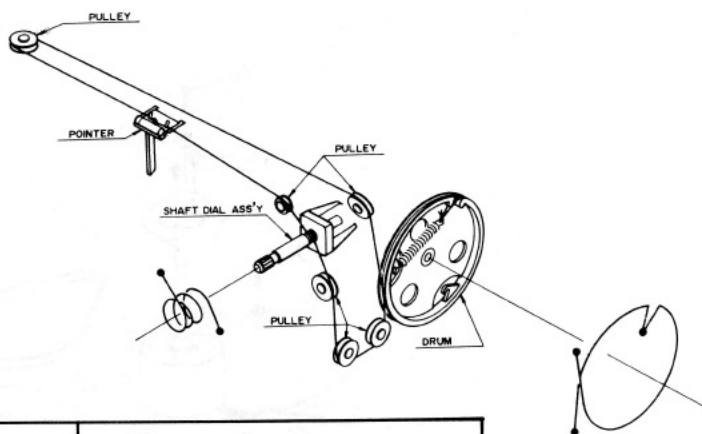
Ref. No.	Part No.	Description
<b>8-TRACK RECORD/PLAYBACK BIAS AUTO STOP PCB ASSY PB1310400165103</b>		
86	PB1310400165103	8-Track Record/Playback Bias Stop PCB Assy
VR301	RV4222924360	Resistor, Variable, 1K ohm
\$3	SS4231924060	Switch, Slide
L303	LC4258920820	Oscillator Coil, Tape Deck
L301,302	LC4259920350	Trap Coil
C327,328	CE0252225	Capacitor, Elect. 47MF 6.3V
C338	CS22340-5	Capacitor, Elect. 1MF 10V
C307,308	CE02523331	Capacitor, Elect. 100MF 10V
C305,306	CDV33/10	Capacitor, Elect. 33MF 10V
C313,314	CE1252522	Capacitor, Elect. 22MF 16V
C319	CE22342-15	Capacitor, Elect. 220MF 16V
C303,304	CS22346-5	Capacitor, Sint. Alum. 1MF 16V
C337	CE22342-11	Capacitor, Elect. 100MF 25V
C323,324	CK0242011	Capacitor, Ceramic 50pF 50V
C309,310	CY22335-11	Capacitor, Mylar 0.018MF 50V
C311,312	CY22335-21	Capacitor, Mylar 0.0022MF 50V
C331,332	CY22335-14	Capacitor, Mylar 0.033MF 50V
C340	CY22335-22	Capacitor, Mylar 0.047MF 50V
C329,330	CY22335-16	Capacitor, Mylar 0.068MF 50V
C321,322, 333,325, 326 334	CE22342-2	Capacitor, Elect. 1MF 50V
C315,316	CP0217823	Capacitor, Styrofoam 1500pF 50V
C301,302, 317,318	CK22347-10	Capacitor, Ceramic 680pF 50V
C335,336	CK22348-1	Capacitor, Ceramic 0.047MF 50V
C320	CE22342-10	Capacitor, Elect. 100MF 35V
C339		Capacitor, Styrofoam 5000pF 125V
D305,306	TRVD1121	Diode, VD1121
IC301,302	TRTA7120P	Integrated Circuit TA7120P-D
R309,310	RF25DC472J	Resistor, Carbon 4.7K ohm 1/4W 5%
R302,301	RF25DC681J	Resistor, Carbon 680 ohm 1/4W 5%
R321,322	RF25DC222J	Resistor, Carbon 2.2K ohm 1/4W 5%
R304,303, 335	RF25DC100J	Resistor, Carbon 10 ohm 1/4W 5%
R320,325, 326	RF25DC102J	Resistor, Carbon 1K ohm 1/4W 5%
R315,316	RF25DC103J	Resistor, Carbon 10K ohm 1/4W 5%
R331,332	RF25DC104J	Resistor, Carbon 100K ohm 1/4W 5%
R339	RF25DC152J	Resistor, Carbon 1.5K ohm 1/4W 5%
R337	RF25DC180J	Resistor, Carbon 18 ohm 1/4W 5%
R323,324	RF25DC182J	Resistor, Carbon 1.8K ohm 1/4W 5%
R327,328	RF25DC221J	Resistor, Carbon 220 ohm 1/4W 5%
R340	RF25DC222J	Resistor, Carbon 2.2K ohm 1/4W 5%
R341,343	RF25DC332J	Resistor, Carbon 3.3K ohm 1/4W 5%
R305,306, 329,330	RF25DC334J	Resistor, Carbon 330K ohm 1/4W 5%
R346	RF25DC472J	Resistor, Carbon 4.7K ohm 1/4W 5%
R311,312, 349,350	RF25DC562J	Resistor, Carbon 5.6K ohm 1/4W 5%
R307,308	RF25DC563J	Resistor, Carbon 56K ohm 1/4W 5%
R313,314, 317,318	RF25DC683J	Resistor, Carbon 68K ohm 1/4W 5%
R344,345	RF25DC822J	Resistor, Carbon 8.2K ohm 1/4W 5%
R319	RF25DC392J	Resistor, Carbon 3.9K ohm 1/4W 5%
R336	RC20BF122J	Resistor, Carbon 1.2K ohm 1/2W 5%
R342	RC20BF681J	Resistor, Carbon 680 ohm 1/2W 5%

Ref. No.	Part No.	Description
<b>8-TRACK RECORD/PLAYBACK BIAS AUTO STOP PCB ASSY PB1310400165102</b>		
R333	R3AXPK122A	Resistor, 1.2K ohm 1W
R334	R3AXPK221A	Resistor, 220 ohm 1W
R348	R3WXP391A	Resistor, 390 ohm 3W
D301,302, 303,304	TR1S188FM1	Diode, 1S188FM1
Q304,305	TR2SC536D	Transistor 2SC536D
Q301,302	TR2SC693E	Transistor 2SC693E-L-WHT
Q306	TR2SD400D	Transistor 2SD400D
Q303	TR2SD330E	Transistor 2SD330E



- IC301, 302 TA-7120P
- Q301, 302 2SC693 EL-WHT
- Q304, 305 2SC536 D FP
- Q306 2SD400 D
- Q303 2SD330 E
- D301 ~ 304 1S188 FM
- D305, 306 VD1121





Ref. No.	Part No.	Description
<b>TAPE DECK ASSY 1310400700401</b>		
1	4226927090	Connector PCB
2	4231971280	Switch, Leaf
3*	4237920121	Terminal Strip 4 Lug
4	4242921040	Record/Playback Head
5	4526929001	Motor DC
6	CE22342-14	Capacitor, Elect. 200MF 25V
7	TRF14K(P)	Diode F14K(P)
8	RC20BF150K	Resistor 15 ohm 1/2W
9	1310380300120	Gear Arm, Assembly
10,10-1	1310380400130	Head Base Assembly
11	1310380600130	Gear Arm, Assembly
12	1310380600140	Lever, Stop Assembly
13,13-1	1310380600150	Slide Assembly, Record
14*	1310380700100	Chassis Assembly
15	1310380800110	Flywheel Capstan Assembly
16	1310400800301	Solenoid Assembly
17*	1312141013700	Cover
18*	1310301610400	Wire Clamp
19*	1312380200120	Bridge
20	1312380300120	Guide
21*	1312380400120	Motor Mounting Bracket
22	1312380600110	Pin Record Lock
23	1312380700110	Tape Guide
24	1312381100120	Head Base Adjustment Cam
25	1312381500110	Stopper, Plunger
26*	1312382100100	Bracket, Record Lever
27*	1312382100110	Bracket, Record Lever
28	1312382200110	Planetary Gear
29	1312420821200	Spacer
30	1312480200120	Sensor
31	1312480400120	Drive Belt
32	1312480800120	Screw, Head Base Adjustment
33*	1312480800130	Screw, Record Lock Slide
34	1312480800140	Screw, Azimuth
35*	1312480900170	Washer, Motor Mount
36*	1312480900180	Washer, Gear Arm Assembly
37	1312580100210	Spring, Head Base
38	1312580100220	Spring, Azimuth
39	1312580100230	Spring, Solenoid Plunger
40	1312580100240	Spring, Record Lock Pin
41	1312580100250	Spring, Record Slide Assembly
42	1312580100260	Spring, Gear Arm Assembly
43	1412446908800	Pad, Tape
44	4253920210	Choke Coil
45*	3353020310000	Wire Assembly
46*	3353040285000	Wire Assembly
47*	3353090320000	Wire Assembly
48*	1083110200000	E Ring 2mm
49*	1083110250000	E Ring 2.5mm
50*	1083110300000	E Ring 3mm
51*	1083111000000	E Ring 10mm
52*	1013110260401	Screw Pan Head 2.6 x 4mm
53*	1013110260603	Screw Pan Head 2.6 x 6mm
54*	1013110301201	Screw Pan Head 3 x 12mm
55*	1013120300604	Screw Flat Head 3 x 6mm
56*	1023120260600	Screw Pan Head 2.6 x 6mm
57*	1023220301202	Screw Tap 3 x 12mm
58*	1013110300401	Screw Pan Head 3 x 4mm
59*	1023120300602	Screw Pan Head 3 x 6mm
60*	1053120300002	Spring Washer 3mm
95*	1310400700401	Tape Deck Assembly

\* Not a Service Part.

# 8 TRACK TAPE DECK EXPLODED VIEW

