Capehart/Dumont
DD8PK, DD9RPK, SKT1200, 8TP72/73R/92/R93 (Ch. 2000092, 2000093

MODELS 8TP-92 — 8TPR-93
AM/FM ALIGNMENT

Equipment Required

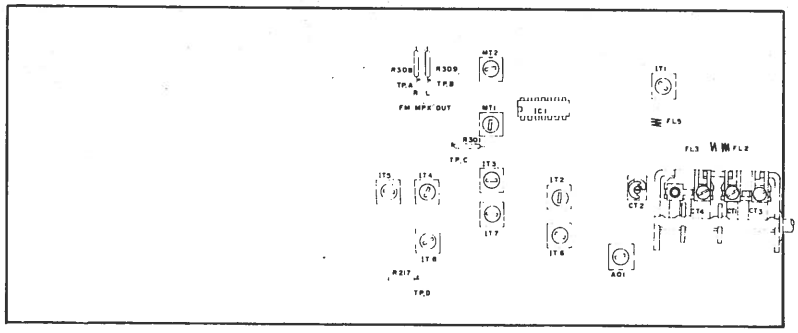
1. RF Signal Generator
2. Electronic Voltmeter A.C.V.T.V.M.

General

1. Signal input must be as low as possible to avoid overload and clipping. (Use highest sensitivity of output indicator)
2. Volume control at maximum. Bass, Treble and Balance control at mechanical center.
3. Standard modulation is 1000 Hz at 30% amplitude.
4. Connect 8 ohm dummy load across Speaker Output Jack.

Step	Connect Signal Source To	Connect Output Indicator To	Set Signal Generator To	Set Radio Dial To	Adjust	Adjust For	Step
			Set Function Switch to AM				
1	Loop of several turns of wire connected across generator leads. Place loop close to the AM antenna.	A.C.V.T.V.M. across J2	455 KHz	Tuning gang closed	IT6 IT7 IT8	Maximum output on V.T.V.M.	1
2			525 KHz	Tuning gang closed	AO1		2
3			1650 KHz	Tuning gang open	CT4		3
4			Repeat Steps 2 and 3 for optimum sensitivity				4
5	Same as above	A.C.V.T.V.M. across J2	600 KHz	Tune for signal	AL1	Maximum output on V.T.V.M.	5
6			1400 KHz		CT3		6
7			Repeat Steps 5 and 6 for optimum sensitivity				7
			Set Function Switch to FM				
1	Place generator leads across FM ant terminals	A.C.V.T.V.M. across J2	10.7 MHz	Tuning gang closed	IT1 IT2 IT3 IT4	Maximum output on V.T.V.M.	1
2		DC probe across C31	10.7 MHz (Unmod.)		IT5	Zero reading, a positive or negative reading will be obtained on either side of correct setting.	2
3			Repeat Steps 1 and 2 for optimum sensitivity				3
4	Same as above	A.C.V.T.V.M. across J2	86.5 MHz	Tuning gang closed	FL5	Maximum output on V.T.V.M.	4
5			109 MHz	Tuning gang closed	CT2		5
6			Repeat Steps 4 and 5 for optimum sensitivity				6
7	Same as above	A.C.V.T.V.M. across J2	90 MHz	Tune for signal	FL2 FL3	Maximum output on V.T.V.M.	7
8			106 MHz		CT1		8
9			Repeat Steps 7 and 8 for optimum sensitivity				9

PC BOARD ALIGNMENT LAYOUT MODELS 8TP-92 — 8TPR-93



MODELS 8TP-92 — 8TPR-93
MULTIPLEX ALIGNMENT

Equipment Required

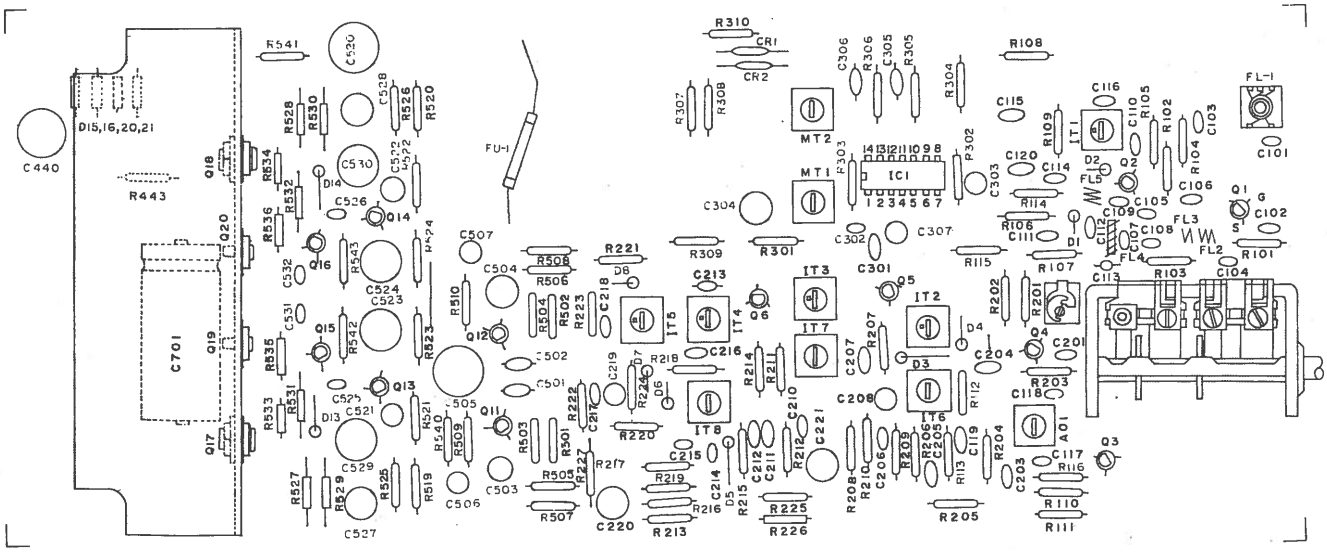
1. FM-Stereo Simulator
2. Oscilloscope or V.T.V.M.

Preliminaries

1. Connect FM-Stereo Simulator to FM antenna terminal.
2. Tune radio to a 100 MHz signal from the FM-Stereo Simulator.
3. Set function switch (SW1) to FM Stereo position.
4. Connect low side of oscilloscope or V.T.V.M. to chassis ground adjacent to point where high side is connected.
5. Set RF deviation to approximately 75 KHz.
6. Keep input signal above limiting level.
7. Set 19 KHz subcarrier level to 10%.

Step	Stereo Simulator Setting		Output Indicator	Adjust	Adjust for
	Modulation Freq.	Function			
1	19 KHz	Stereo left	Stero Indicator Lamp. PL7	MT1 MT2	Maximum, with stereo indicator light lit.
2	1 KHz	Stereo left	Oscilloscope or VTVM to TP(A)	MT1	Adjust for minimum.
3	1 KHz	Stereo left	Oscilloscope or VTVM to TP(A)	MT2	Adjust for minimum.
4	1 KHz	Stereo right	Oscilloscope or VTVM to TP(B)	MT2	Adjust to obtain same level as that of left channel.
5	Repeat Steps 3 and 4 to obtain same level at Left and Right Channels.				

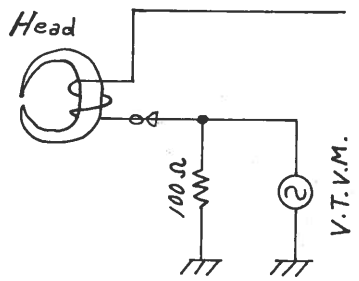
MODEL 8TPR-93
MAIN PC BOARD TOP VIEW



MODELS 8TP-92 — 8TPR-93
8 TRACK TAPE RECORDING ALIGNMENT

Equipment Required

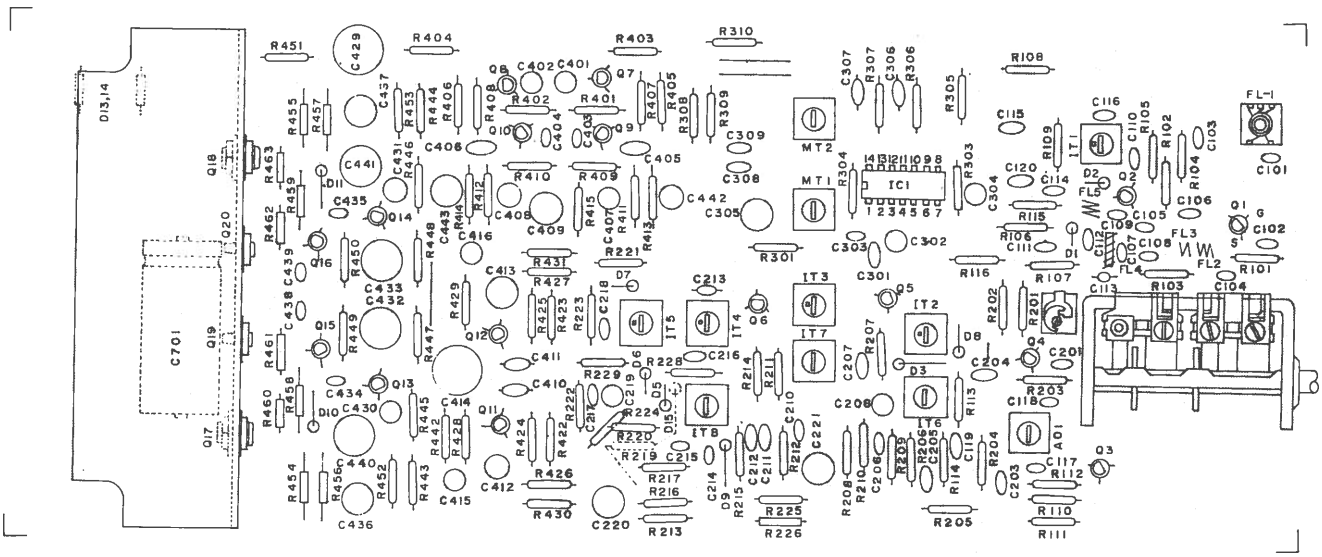
1. CR Signal Generator
2. Oscilloscope or V.T.V.M.



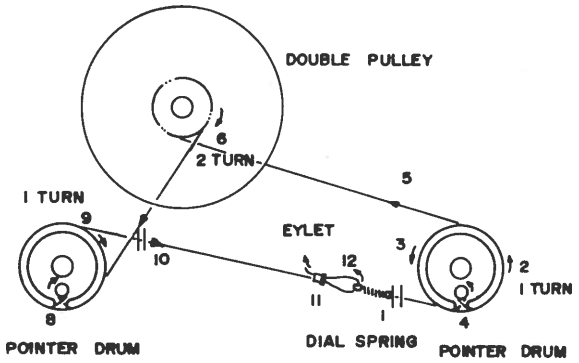
Preliminaries

1. Connect CR Signal Generator to AUX INPUT jacks.
2. Set there to a 1KHz, 100mV from CR Signal Generator.
3. Stop a recording biass, cut a supply of 60KHz OSC board.
4. Connect 100 ohm and V.T.V.M. to a cold terminal of Tape Head.

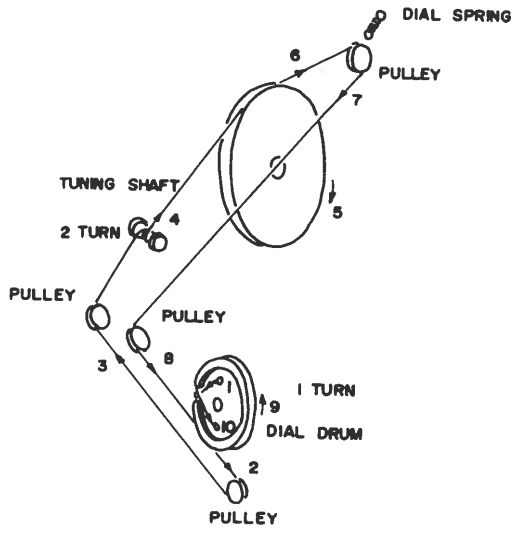
Step	CR Signal Generator		Output	Adjust	Adjust for
	Input	Function			
1	1KHz, 100mV	Tape	V.T.V.M.	RV5, 6	2mV on V.T.V.M. (Recording current 20uA)
2			Level Meter	VT-1	O UV on Level Meter
3	Repeat Steps 1 and 2 to obtain same level Left and Right Channels.				
4	1KHz, 10mV	Tape	V.T.V.M.	RV5, 6	Maximum
5			Level Meter	VT-3	Same Level



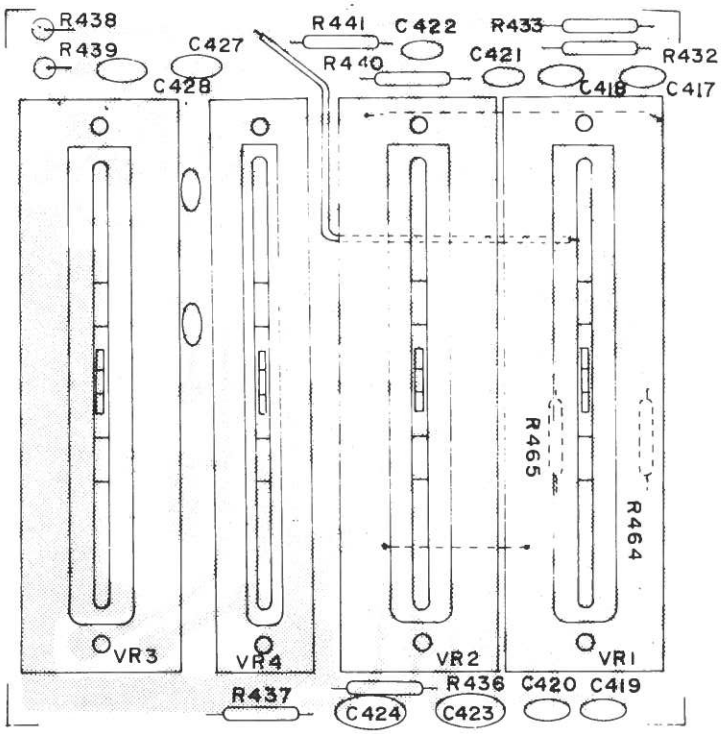
DIAL CORD ARRANGEMENT — AM



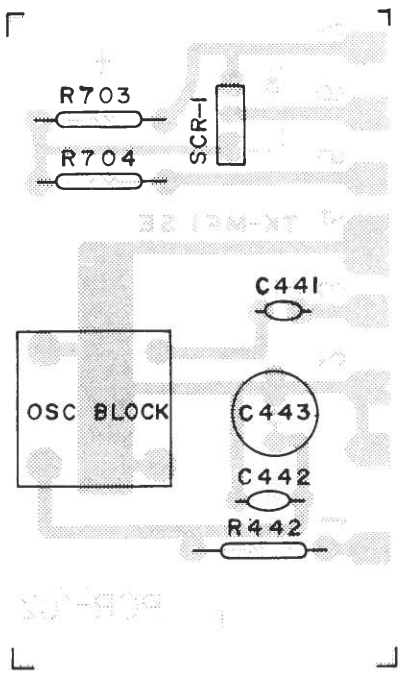
DIAL CORD ARRANGEMENT — FM



MODEL 8TP-92
TONE PC BOARD BOTTOM VIEW



OSC BLOCK BOARD TOP VIEW
MODEL 8TPR-93



SEMICONDUCTORS

ITEM	PART NO.
CHASSIS 2000093	
D1	1S2139-B
D2	1S1555
D3	1N60
D4	1S1555
D5	WZ-120
D6	1N60
D7	1N60-P
D8	1N60-P
D9	1N60
D10	1N60
D11	1N60
D12	1N60
D13	VD-1210
D14	VD-1210
D15	1N4002
D16	1N4002
D17	1N4002
D19	1N4002
D20	1N4002
D21	(SR-1K)
IC1	1M-1307-N (SH-76110)
IC2	uPC566-H
IC3	uPC566-H
Q1	2SK-19-GR
Q2	2SC394-OR
Q3	2SC380-OR
Q4	2SC380-OR
Q5	2SC380-OR
Q6	2SC380-OR
Q7	2SC733-GR
Q8	2SC733-GR
Q9	2SC733-GR
Q10	2SC733-GR
Q11	2SC733-GR
Q12	2SC733-GR
Q13	2SA495-OR
Q14	2SA495-OR
Q15	2SC509-QR
Q16	2SC509-QR
Q17	2SC496-OR
Q18	2SC496-OR
Q19	2SA496-OR
Q20	2SA496-OR
SCR-1	SF1R3B41
CHASSIS 2000092	
D1	1S2139-B (1TT-410)
D2	1S1555
D3	1N60
D4	1S1555
D6	1N60-P
D7	1N60-P
D8	1N60
D9	WZ-120
D10	VD-1210 (SV-9x2)
D11	VD-1210 (SV-9x2)
D12	1N4002 (SR-1K)
D13	1N4002 (SR-1K)
D14	1N4002 (SR-1K)
D15	1N60
IC1	LM-1307-N (SH-76110)
Q1	2SK-19-GR
Q2	2SC394-OR
Q3	2SC380-OR
Q4	2SC380-OR
Q5	2SC380-OR
Q7	2SC733-GR
Q8	2SC733-GR
Q9	2SC733-GR
Q10	2SC733-GR
Q11	2SC733-GR
Q12	2SC733-GR
Q13	2SA495-OR
Q14	2SA495-OR
Q15	2SC509-OR (2SC261-R)
Q16	2SC509-OR (2SC261-R)
Q17	2SC496-OR
Q18	2SC496-OR
Q19	2SA496-OR
Q20	2SA496-OR

ELECTROLYTICS/VARIABLE CAPS

ITEM	VALUE	PART NO.
CHASSIS 2000093		
C208	33uF 10V	CE6/11V10/336
C220	100uF 16V	CE10/16V16/107
C221	220uF 16V	CE10/20V16/227
C303	4.7uF 16V	CE5/11V16/106
C304	470uF 16V	CE13/25V16/477
C307	4.7uF 16V	CE5/11V16/106
C405	4.7uF 16V	CE5/11V16/106
C406	4.7uF 16V	CE5/11V16/106
C410	4.7uF 16V	CE5/11V16/106
C411	4.7uF 16V	CE5/11V16/106
C412	33uF 10V	CE6/11V10/336
C413	33uF 10V	CE6/11V10/336
C413	10uF 16V	CE5/11V16/106
C417	10uF 16V	CE5/11V16/106
C418	100uF 16V	CE10/16V16/107
C419	100uF 16V	CE10/16V16/107
C420	4.7uF 16V	CE5/11V16/106
C421	4.7uF 16V	CE5/11V16/106
C422	1uF 16V	CE5/11V16/105
C423	1uF 16V	CE5/11V16/105
C424	100uF 16V	CE10/16V16/107
C425	100uF 16V	CE10/16V16/107
C426	1uF 16V	CE5/11V16/105
C427	1uF 16V	CE5/11V16/105
C428	33uF 10V	CE6/11V10/336
C429	33uF 10V	CE6/11V10/336
C432	4.7uF 16V	CE5/11V16/475
C433	4.7uF 16V	CE5/11V16/475
C434	1uF 16V	CE5/11V16/105
C435	1uf 16V	CE5/11V16/105
C436	47uF 10V	CE8/13V10/476
C437	47uF 10V	CE8/13V10/476
C443	10uF 16V	CE5/11V16/106
C444	470uF 25V	CE16/25V25/477
C503	47uF 10V	CE8/13V10/476
C504	47uF 10V	CE8/13V10/476
C505	470uF 16V	CE13/25V16/477
C506	10uF 16V	CE5/11V16/106
C507	10uF 16V	CE5/11V16/106
C520	470uF 25V	CE16/25V25/477
C521	4.7uF 16V	CE5/11V16/475
C522	4.7uF 16V	CE5/11V16/475
C523	470uF 16V	CE13/25V16/477
C524	470uF 16V	CE13/25V16/477
C527	100uF 16V	CE10/16V16/107
C528	100uF 16V	CE10/16V16/107
C529	470uF 16V	CE13/25V16/477
C530	470uF 16V	CE13/25V16/477
C701	2200uF 35V	CE26/61H35/228
C703	470uF 25V	CE16/25V25/477

CHASSIS 2000092

C208	33uF 10V	CE6/11V10/336
C219	10uF 10V	CE5/11V10/106
C220	100uF 10V	CE10/13V10/107
C221	220uF 16V	CE3/25V16/227
C302	4.7uF 16V	CE5/11V16/475
C304	4.7uF 16V	CE5/11V16/475
C305	470uF 25V	CE25/25V16/477
C401	4.7uF 16V	CE5/11V16/475
C402	4.7uF 16V	CE5/11V16/475
C407	4.7uF 16V	CE5/11V16/475
C408	4.7uF 16V	CE5/11V16/475
C409	220uF 16V	CE3/25V16/227
C412	47uF 16V	CE8/13V16/476
C413	47uF 16V	CE8/13V16/476
C414	470uF 25V	CE25/25V16/477
C415	10uF 10V	CE5/11V10/106
C416	10uF 10V	CE5/11V10/106
C429	470uF 25V	CE6/25V25/477
C430	4.7uF 16V	CE5/11V16/475
C431	4.7uF 16V	CE5/11V16/475
C432	470uF 25V	CE25/25V16/477
C434	470uF 25V	CE25/25V16/477
C436	100uF 10V	CE10/13V10/107
C437	100uF 10V	CE10/13V10/107
C440	470uF 25V	CE25/25V16/477
C441	470uF 25V	CE25/25V16/477
C442	47uF 16V	CE8/13V16/476
C443	47uF 16V	CE8/13V16/476
C701	2200uF 35V	CE26/61435/222
C702	470uF 25V	CE6/25V25/477

BOTH CHASSIS

C1	Variable	CVA2T3-A
CT1	Trimmer	CT1-01

CONTROLS/SPECIAL RESISTORS

ITEM	DESCRIPTION	PART NO.
CHASSIS 2000093		
VR1	Treble	SV502AA4P4-1
VR2	Bass	SV502AA4P4-1
VR3	Balance	SV103W04PU-1
VR4	Volume	SV502BB4B4-1
VR5	Volume, Rec.	RV102A01P4-2
VR6	Volume, Rec.	RV102A01P4-2
VT1	Semi-Fixed	VTB-0SY1
VT2	Semi-Fixed	VTB-0SY1
VT3	Semi-Fixed	VTB-0SY1
CHASSIS 2000092		
VR1	Treble	SV502A04P4-1
VR2	Bass	SV502A04P4-1
VR3	Balance	SV103W04P4-1
VR4	Volume	SV502BB4P4-1

CABINET PARTS

NAME	PART NO.
Knob, Tuning	C-435330
Knob, Small (1)	C-435331
Knob, Slide	C-435355
Knob, Selector	C-435334
Knob, Channel	C-435333
Knob, Tape (1)	C-431310-2
Knob, Recording (1)	C-431310-1

NO NOTE: Both Chassis
(1) Chassis 2000093 Only.
(2) Chassis 2000092 Only.

COILS/TRANSFORMERS

ITEM	PART NO.
AL1	FL-202
OA1	OL-102
FL1	AH-102
FL2	RH-S01
FL3	RH-S02
FL4	OH-100
FL5	OH-S01
IT1	ITF-111
IT2	ITF-112
IT3	ITF-112
IT4	ITF-113
IT5	ITF-114
IT6	ITA-101
IT7	ITA-111
IT8	ITA-112
MT1	MT-001
MT1	MT-902
MT2	MT-001
MT2	MT-302
RL1	MT-111
RL2	MT-111
RL3	IL-101
RL4	IL-101
PT1 (2)	PT-6005
QSB-101	80S-101

(1) Chassis 2000093 Only
(2) Chassis 2000092 Only

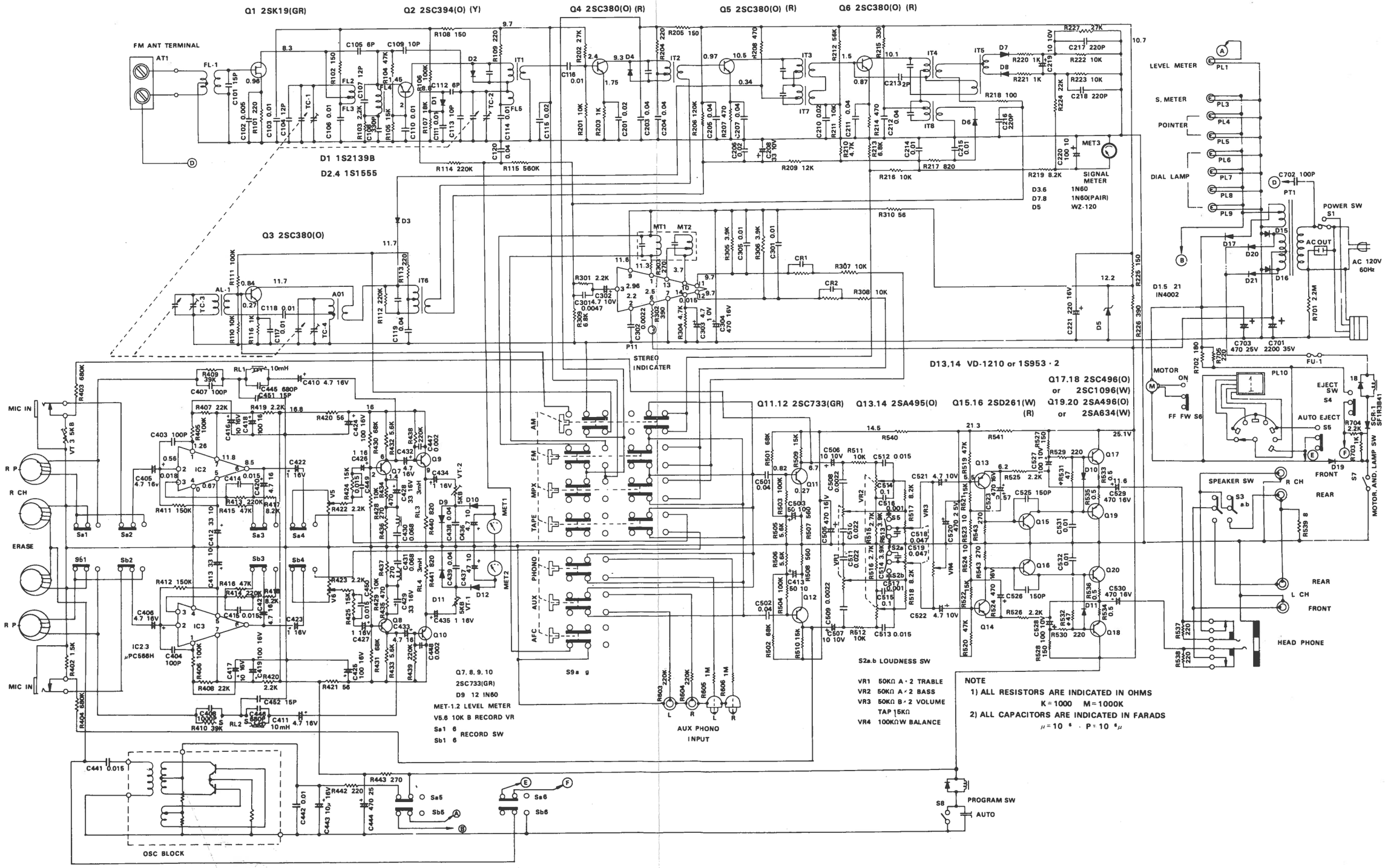
MISCELLANEOUS

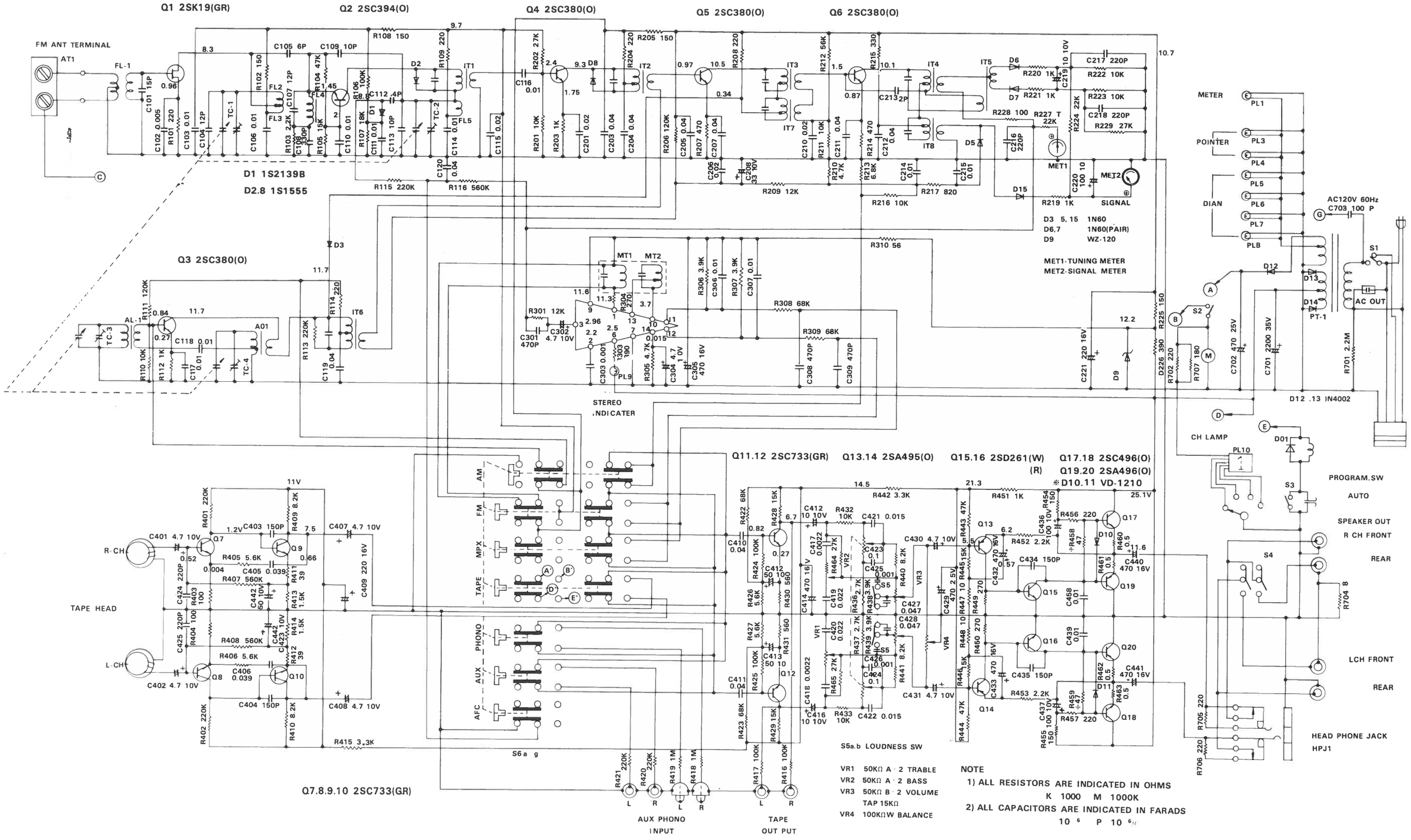
ITEM	NAME	PART NO.
FU1 (1)	Fuse, 1.9A	MIS-05
Met 1 (1)	Meter, L. Level	LMT-101
Met 2 (1)	Meter, R. Level	LMT-102
Met 3 (1)	Meter, Tuning	LMT-103
PC1	PC Board, Main	PCM-107UL
PC2	PC Board, Tone	PCT-106
PC3	PC Board, Switch	PCS-102
PC4 (1)	PC Board, Rec./Play	PCR-101UL
PC5 (1)	PC Board, Osc	PCR-102UL
S1	Switch, Power	SL1C2PS0-3UL
S2 (1) S4 (2)	Switch, Speakers	SL2C2PS0-3
S3 (1) S5 (2)	Switch, Loudness	SL2C2PS0-3
S4 (1)	Switch, Eject	SP2C2PS-4
S5 (1)	Switch, Auto Eject	SP2C2PS-3
S6 (1)	Switch, Fast Fwd.	SP2C2PS-3
S6 (2)	Switch, Function	SP4CPS-1
S10 (1)	Switch, Function	SU4C7PS-1
S11 (1)	Switch, Rec./Play	SP6C2P0-1
	Microphone	MIC-01

(1) Chassis 2000093 Only
(2) Chassis 2000092 Only

Capehart/Dumont DD8PK, DD9RPK, SKT1200
8TP72/73R/92/R93
(Ch. 2000092, 2000093

MODEL 8TPR-93 SCHEMATIC DIAGRAM




Q1 2SK19(GR)
Q2 2SC394(O)
Q4 2SC380(O)
Q5 2SC380(O)
Q6 2SC380(O)
Q3 2SC380(O)
FM ANT TERMINAL
AT1
FL-1
D1 1S2139B
D2.8 1S1555
D3
R115 220K
R116 560K
R209 12K
R216 10K
R217 820
R219 1K
R310 56
MET1
MET2
SIGNAL
METER
POINTER
DIAN
PL1
PL3
PL4
PL5
PL6
PL7
PLB
D3 5, 15 1N60
D6,7 1N60(PAIR)
D9 WZ-120
MET1-TUNING METER
MET2-SIGNAL METER
AC120V 60Hz
C703 100 P
S1
AC OUT
D12
D13
D14
PT-1
S2
D12 .13 IN4002
STEREO
INDICATER
PL9
CH LAMP
PL10
D01
S3
PROGRAM.SW
AUTO
SPEAKER OUT
R CH FRONT
REAR
S4
LCH FRONT
REAR
HEAD PHONE JACK
HPJ1
Q11.12 2SC733(GR)
Q13.14 2SA495(O)
Q15.16 2SD261(W)
(R)
Q17.18 2SC496(O)
Q19.20 2SA496(O)
*D10.11 VD-1210
Q7.8.9.10 2SC733(GR)
AM
FM
MPX
TAPE
PHONO
AUX
AFC
S6a g
S5a.b LOUDNESS SW
VR1 50KΩ A 2 TRABLE
VR2 50KΩ A 2 BASS
VR3 50KΩ B 2 VOLUME
TAP 15KΩ
VR4 100KΩW BALANCE
AUX PHONO
INPUT
TAPE
OUT PUT
TAPE HEAD
R-CH
L-CH
NOTE
1) ALL RESISTORS ARE INDICATED IN OHMS
K 1000 M 1000K
2) ALL CAPACITORS ARE INDICATED IN FARADS
10 6 P 10 6//