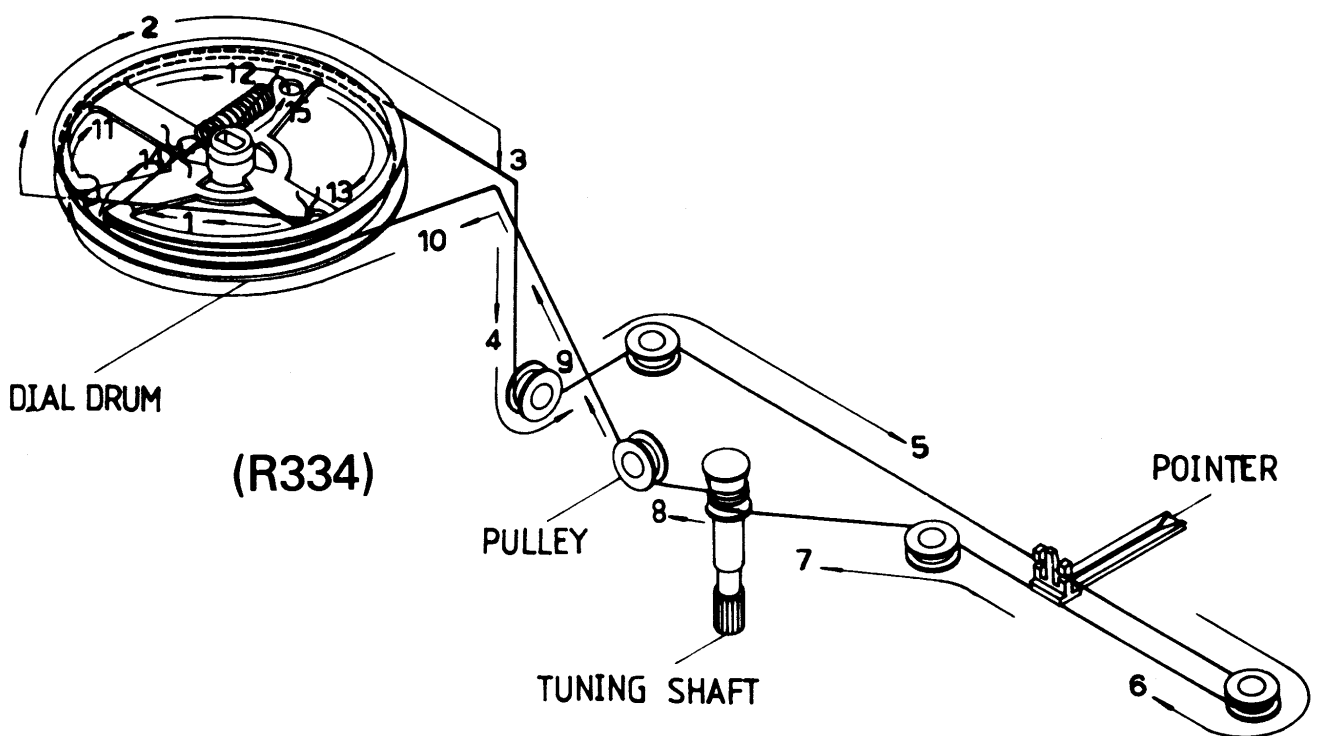


General Description: A mains or battery-operated portable stereo radio cassette recorder operating on A.M. and F.M. wavebands. Integrated circuits are used in the multiplex decoder and A.F. output stages. Sockets are provided for auxiliary inputs and for earphones or extension loudspeakers.

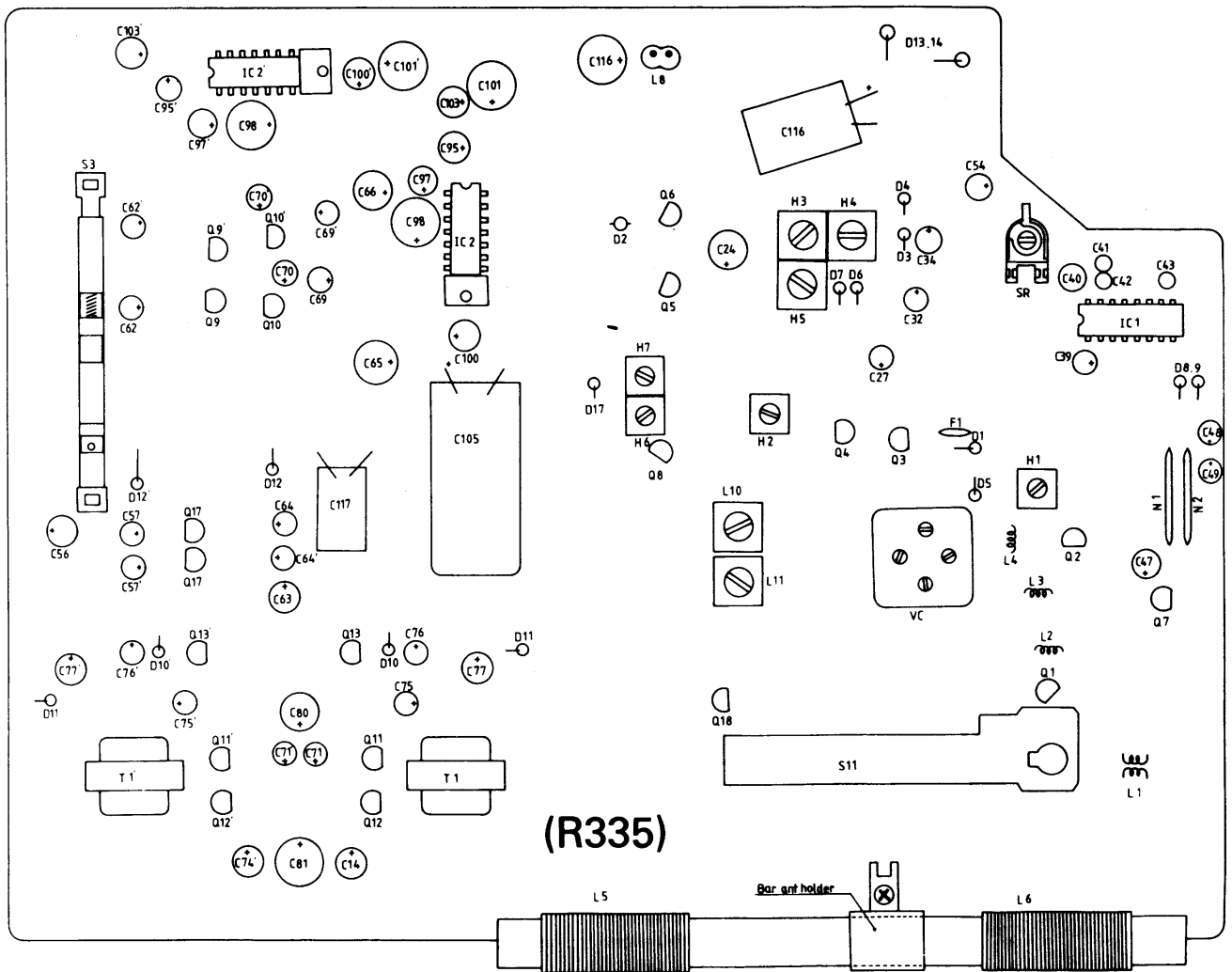
Mains Supply: 240 volts, 50Hz.

Batteries: 9 volts (6×1.5 volts).

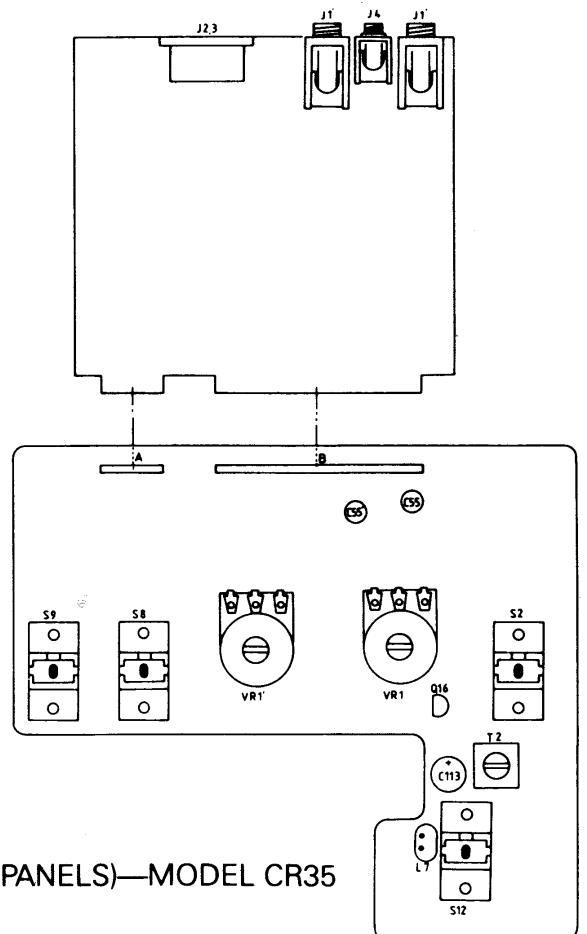
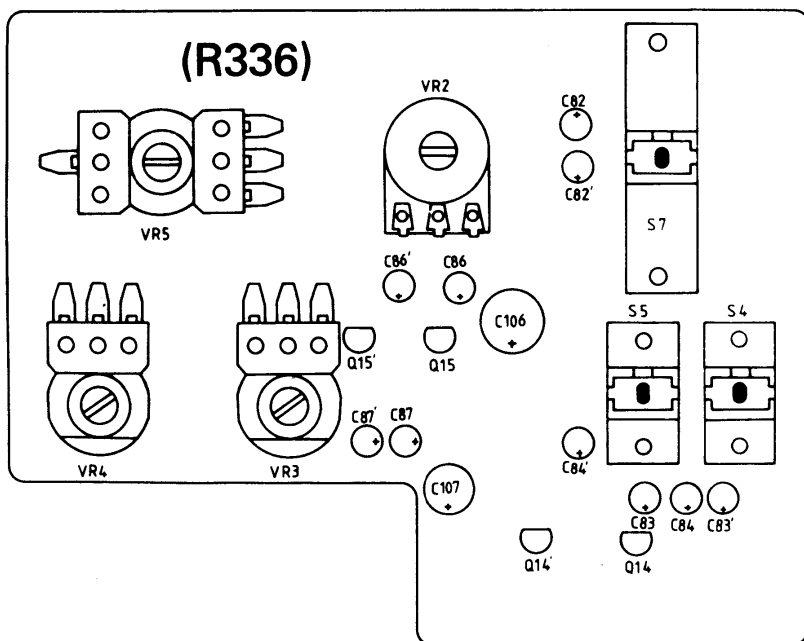
Wavebands: L.W. 145–285kHz; M.W. 520–1620kHz; S.W. 6–18MHz; F.M. 88–108MHz.



(R334) DRIVE CORD—MODEL CR35



(R335) COMPONENT LAYOUT (MAIN PANEL)—MODEL CR35



(R336) COMPONENT LAYOUT (CONTROL, MIXING AND JACK PANELS)—MODEL CR35

Alignment**Long Wave:**

L.W. /M.W. /S.W. /F.M. Selector Rotary Slide Switch L.W.

Voltage Max.

<i>Circuit Alignment</i>	<i>Instrument connection</i>	<i>Step</i>	<i>Gen. freq.</i>	<i>Dial setting</i>	<i>Adjustment</i>
I.F.	M.W. Signal generator radiated signal Output meter (V.T.V.M.)	1	470kHz (Mod.)	Tuning gang fully closed	M.W. I.F.T. H5 H6 H7 Adjust for max. output
	Connect across speaker voice coil	2			Repeat until no further improvement can be made
Oscillator	M.W. Signal generator radiated signal	3	140kHz (Mod.)	Tuning gang fully closed	L10 (L.W. Osc. Coil) Adjust for max. output
	Output meter (V.T.V.M.) Connect across speaker voice coil	4	300kHz (Mod.)	Tuning gang fully open	L.W. Osc. Trimmer CT-3 Adjust for max. output
		5	—	—	Repeat steps 3 and 4
R.F. Tracking	M.W. Signal generator radiated signal	6	175kHz (Mod.)	Tune to signal	L6 (L.W. Ant. coil) Adjust coil on ferrite core for max. output
	Output meter (V.T.V.M.) Connect across speaker voice coil.	7	250kHz (Mod.)	Tune to signal	L.W. Ant. trimmer CT-1 Adjust for max. output
		8	—	—	Repeat steps 6 and 8

Medium Wave:

L.W. /M.W. /S.W. /F.M. Selector Rotary slide Switch M.W.

Volume Max.

<i>Circuit Alignment</i>	<i>Instrument connection</i>	<i>Step</i>	<i>Gen. freq.</i>	<i>Dial setting</i>	<i>Adjustment</i>
I.F.	A.M. Signal generator radiated signal Output meter (V.T.V.M.)	1	470kHz (Mod.)	Tuning gang fully closed	M.W. I.F.T. H5, H6, H7 Adjust for max. output
	Connect across speaker voice coil	2			Repeat until no further improvement can be made
Oscillator	A.M. Signal generator radiated signal	3	520kHz (Mod.)	Tuning gang fully closed	L11 (M.W. Osc. coil) Adjust for max. output
	Output meter (V.T.V.M.) Connect across speaker voice coil.	4	1620kHz (Mod.)	Tuning gang fully open	M.W. Osc. trimmer Adjust for max. output
		5	—	—	Repeat steps 3 and 4
R.F. Tracking	A.M. Signal generator radiated signal	6	600kHz (Mod.)	Tune to signal	L5 (M.W. Ant. coil) Adjust coil on ferrite core for max. output
	Output meter (V.T.V.M.) Connect across speaker voice coil	7	1400 kHz (Mod.)	Tune to signal	M.W. Antenna trimmer Adjust for max. output
		8	—	—	Repeat steps 6 and 7

RADIO SERVICING

Short Wave:

L.W. /M.W. /S.W. /F.M. Selector Rotary Slide Switch M.W.

Volume Max.

<i>Circuit Alignment</i>	<i>Instrument connection</i>	<i>Step</i>	<i>Gen. freq.</i>	<i>Dial setting</i>	<i>Adjustment</i>
I.F.	M.W. Signal generator radiated signal Output meter (V.T.V.M.)	1	470kHz (Mod.)	Tuning gang fully closed	M.W. I.F.T. H5, H6, H7 Adjust for max. output
	Connect across speaker voice coil.	2			Repeat until no further improvement can be made
Oscillator	M.W. Signal generator radiated signal Output meter (V.T.V.M.)	3	6MHz (Mod.)	Tuning gang fully closed	L12 (S.W. Osc. coil) Adjust for max. output
	Connect across speaker voice coil.	4	18MHz (Mod.)	Tuning gang fully open	S.W. Osc. trimmer CT-4 Adjust for max. output
		5	—	—	Repeat steps 3 and 4
R.F. Tracking	M.W. Signal generator radiated signal Output meter (V.T.V.M.)	6	7MHz (Mod.)	Tune to signal	L9 (S.W. Ant. coil) Adjust coil on ferrite core for max. output
	Connect across speaker voice coil.	7	16MHz (Mod.)	Tune to signal	S.W. antenna trimmer CT-2 Adjust for max. output
		8	—	—	Repeat steps 6 and 7

F.M.:

L.W. /M.W. /S.W. /F.M. Selector Rotary Slide Switch F.M.

Volume Max.

<i>Circuit Alignment</i>	<i>Instrument connection</i>	<i>Step</i>	<i>Gen. freq.</i>	<i>Dial setting</i>	<i>Adjustment</i>
I.F.	F.M. I.F. Sweep generator Connect across test point TP-1 Oscilloscope Connect across test point TP-2	1	10.7MHz (Mod.)	Tuning gang fully open	F.M. I.F.T. H1, H2, H3 Adjust for max. symmetrical response
		2	—	—	Repeat step 1
	Oscilloscope Connect across TP-3 and ground	3	10.7MHz (Mod.)	Tuning gang fully open	F.M. I.F.T. H4 Adjust for symmetrical 'S' curve entered 10.7MHz
Oscillator	F.M. Signal generator Connect L1	4	86.5MHz (Mod.)	Tuning gang fully closed	L4 (F.M. Osc. coil) Adjust for max. output
	Output meter (V.T.V.M.) Connect across speaker voice coil	5	110MHz (Mod.)	Tuning gang fully open	F.M. Osc. trimmer Adjust for max. output
		6	—	—	Repeat steps 4 and 5
R.F. Tracking	F.M. Signal generator Connect L1 Output meter (V.T.V.M.) Connect across speaker voice coil	7	90MHz (Mod.)	Tuning to signal	L2 (F.M. R.F. coil) Adjust for max. output
		8	106MHz (Mod.)	Tuning to signal	F.M. R.F. trimmer Adjust for max. output
		9	—	—	Repeat steps 7 and 8

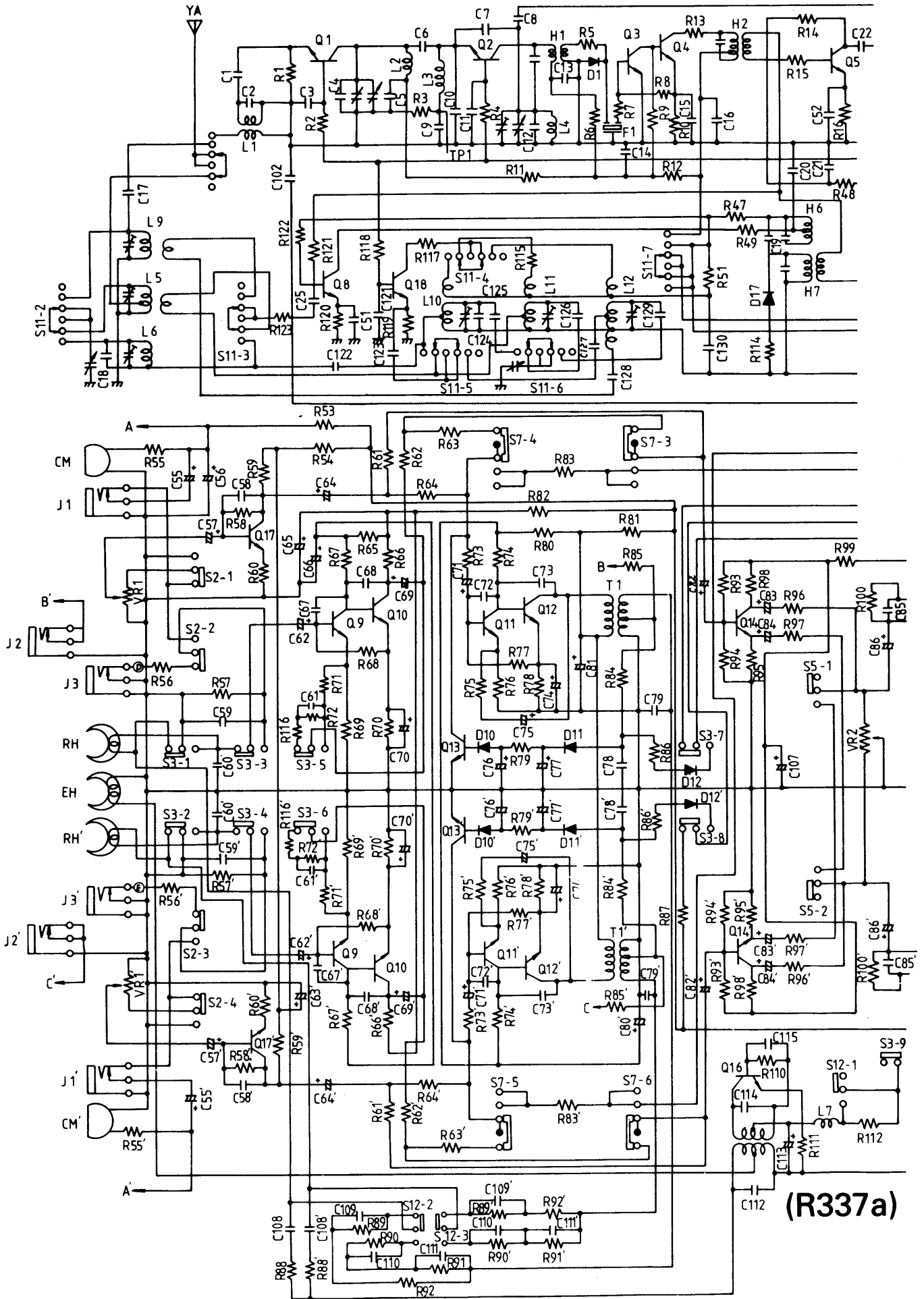
Resistors

R1	272K	R49	101K	R86,86'	221K
R2	682K	R50	681K	R88,88'	152K
R3	152K	R51	472K	R89,89'	472K
R4	682K	R52	681K	R90,90'	223K
R5,6	221K	R53,54	222K	R91,91'	223K
R7	560K	R55,55'	222K	R92,92'	472K
R8	333K	R56,56'	474K	R93,93'	563K
R9	472K	R57,57'	182K	R94,94'	333K
R10	102K	R58,58'	105K	R95,95'	272K
R11	561K	R59,59'	472K	R96,96'	272K
R12,13	121K	R60,60'	220K	R97,97'	472K
R14	272K	R61,61'	472K	R98,98'	272K
R15	470K	R62,62'	472K	R99	391K
R16	331K	R63,63'	822K	R100,100'	105K
R17	682K	R64,64'	103K	R101,101'	562K
R18	391K	R65	222K	R102,102'	271K
R19,20	102K	R66,66'	472K	R103	681K
R21,22	472K	R67,67'	333K	R104,104'	103K
R23	560K	R68,68'	154K	R105,105'	332K
R24	272K	R69,69'	331K	R106,106'	822K
R25-27	104K	R70,70'	152K	R107,107'	562K
R28	153K	R71,71'	123K	R108,108'	820K
R29	153K	R72,72'	224K	R109,109'	101K
R30	102K	R73,73'	332K	R110	183K
R31	104K	R74,74'	103K	R111	330K
R32-34	272K	R75,75'	153K	R112	151K
R35	331K	R76,76'	470K	R113	330K
R36,37	472K	R77,77'	154K	R114	683K
R38	153K	R78,78'	471K	R115	102K
R39	332K	R79,79'	332K	R116,116'	682K
R40,41	123K	R80,80'	681K	R118	103K
R42	222K	R81	471K	R117	221K
R43	102K	R82	102K	R119	152K
R44	683K	R83,83'	123K	R120	471K
R45	121K	R84,84'	334K	R121	823K
R46	152K	R85,85'	473K	R122	684K
R47	272K	R87	473K	R123	470K
R48	101K				

Semiconductors

Q1	1359B	Q10,10'	0828R	Q16	0828R
Q2	1359A	Q11,11'	0828R	Q17,17'	0282R
Q3-6	0829B	Q12,12'	0828R	Q18	0829B
Q7	0828R	Q13,13'	0828P	IC1	N56-OAN-0362
Q8	0829B	Q14,14'	0828R	IC2,2'	N56-OAN-7115
Q9,9'	0644R	Q15,15'	0828R		

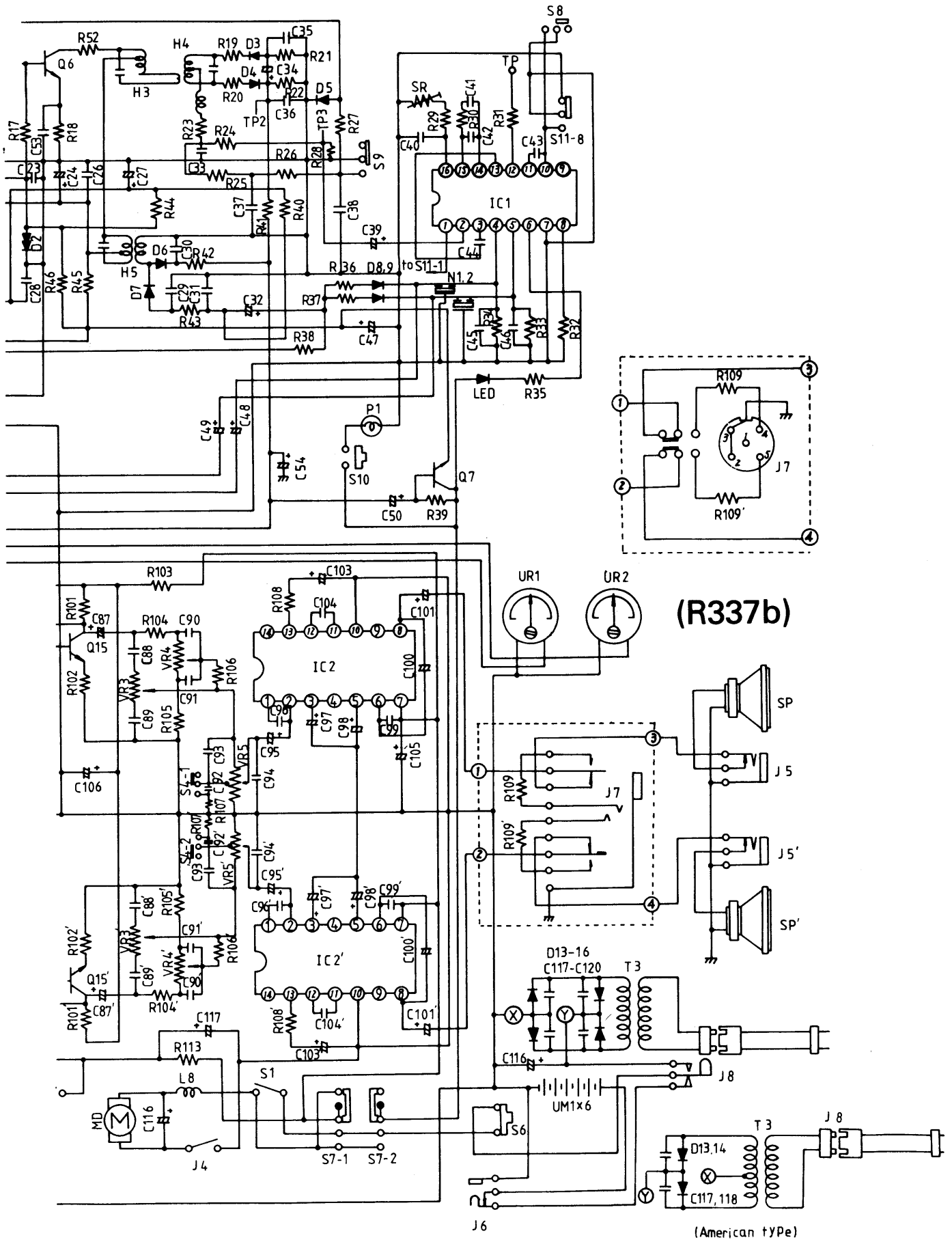
RADIO SERVICING



(R337a)

(R337a) CIRCUIT DIAGRAM—MODEL CR35 (PART)

ALBA



(R337b) CIRCUIT DIAGRAM—MODEL CR35 (CONTINUED)