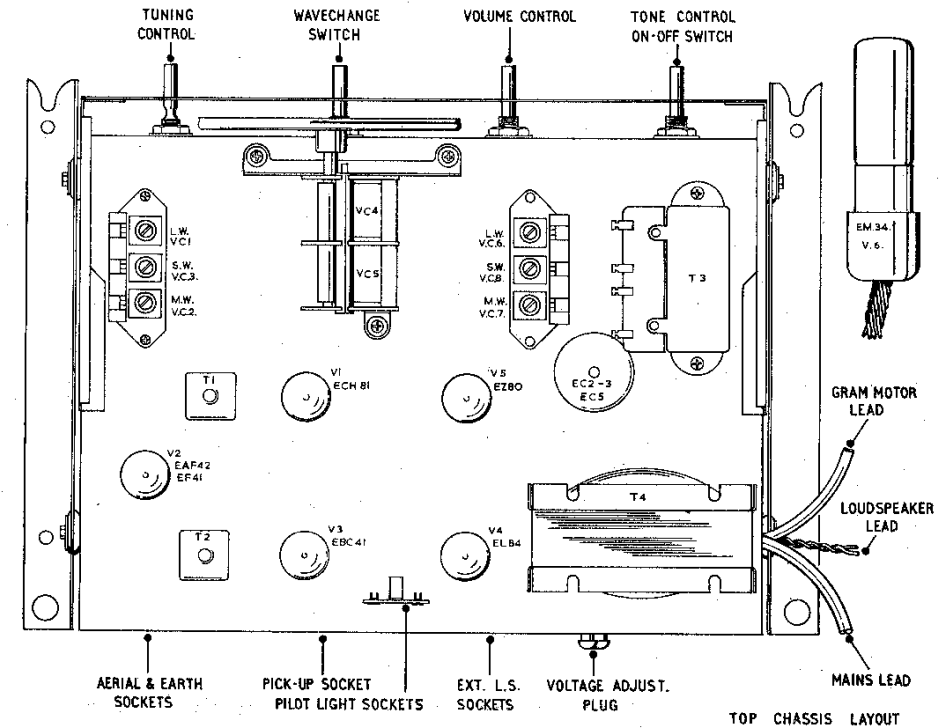
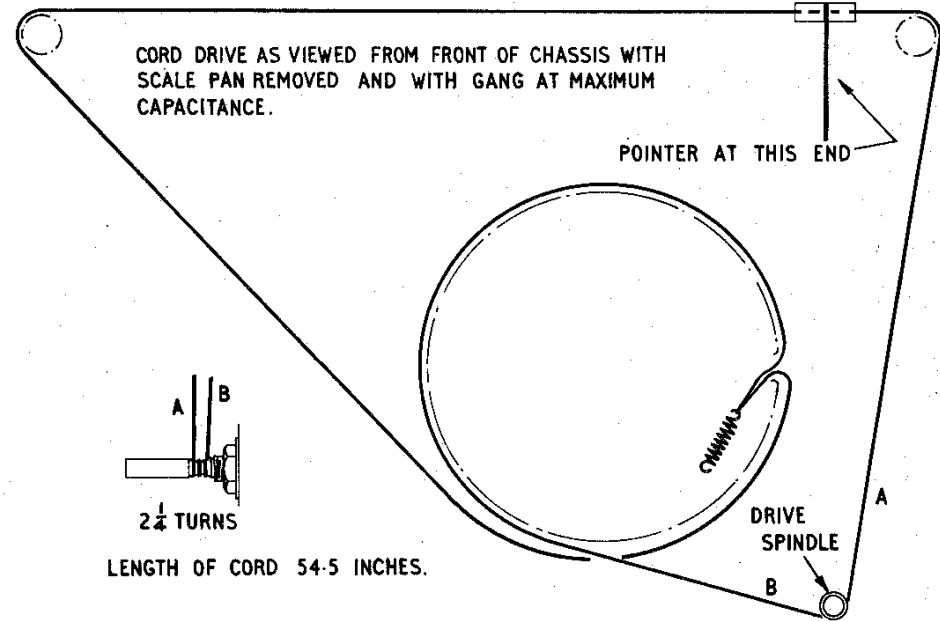
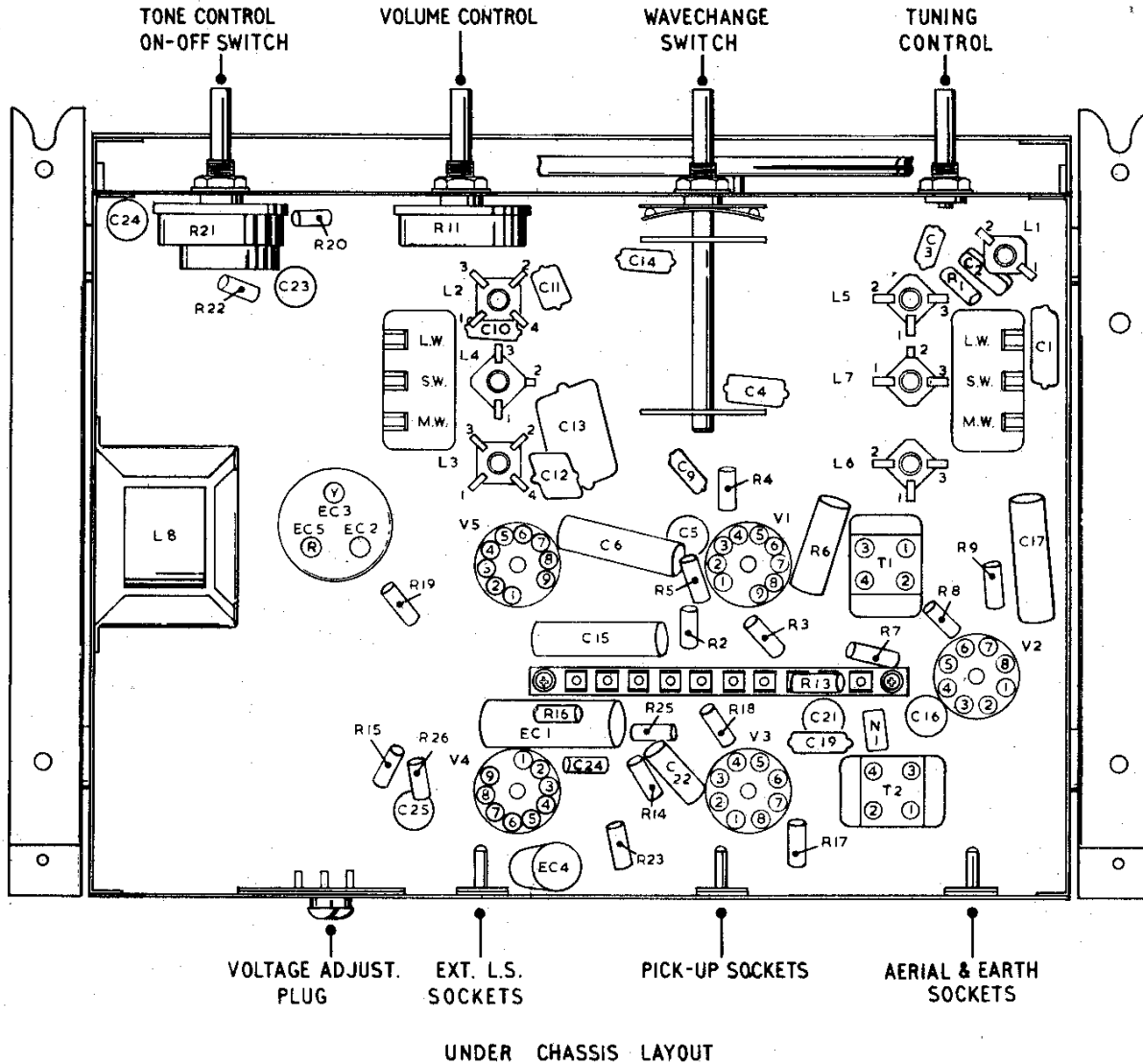




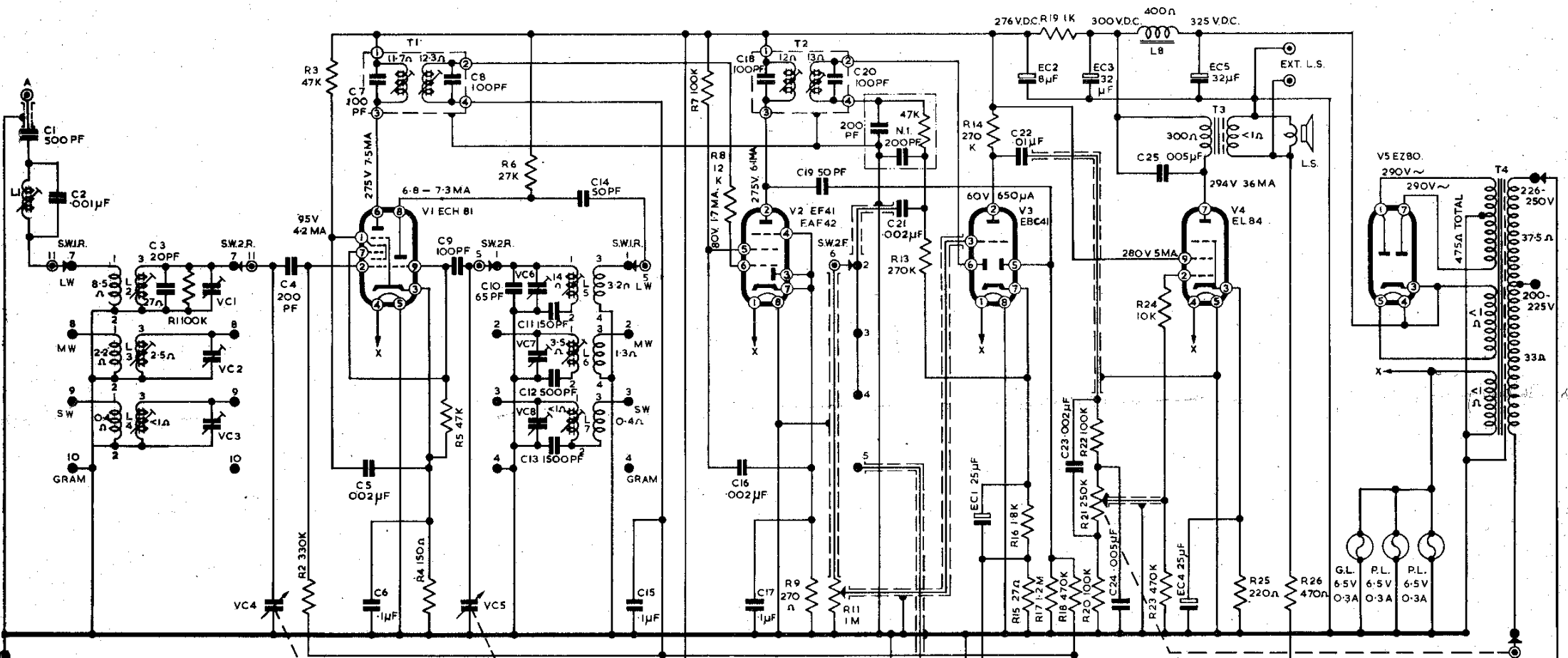
# REGENTONE Service

## BULLETIN No. 118 MODEL ARG. 88

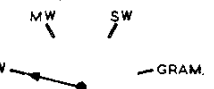
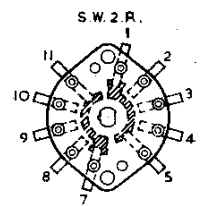
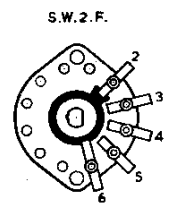
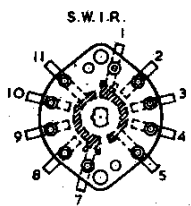
CONSOLE RADIOGRAM WITH THREE WAVEBAND RECEIVER AND AUTOMATIC 3-SPEED RECORD CHANGER FOR A.C. MAINS.



- RESISTORS: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26
- CONDENSERS: EC1, EC2, EC3, EC4, EC5

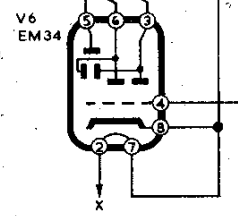


TRIMMERS 4-40PF



SWITCH WAFERS AS VIEWED ON UNDERSIDE OF CHASSIS FROM KNOB

SWITCH POSITION



NI. MAY CONSIST OF PRINTED CIRCUIT NETWORK

200-250V A.C. MAINS

## CIRCUIT DATA

### Wavebands

Long Wave : 1,000–2,000 Metres.

Medium Wave : 200–550 Metres.

Short Wave : 6–18 Mc/s.

Power Supply : 200–250V A.C. 50 c.p.s.

Pick-up : Crystal T/O.

Output : 3 Watts with 10 Dbs. of Negative Feedback.

Extension Loudspeaker : Low impedance.

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## DISMANTLING INSTRUCTIONS

In order to remove the chassis from the cabinet, the following procedure should be adopted.

1. Remove all knobs by exerting a pull on each in turn.
2. Disconnect motor lead from autochanger.
3. Disconnect loudspeaker leads.
4. Remove all plugs from sockets on chassis.
5. Unclip scale lamp holders from their brackets.
6. Unplug gram pilot lamp leads from chassis.
7. Withdraw tuning indicator from clip, or remove octal holder from its base.
8. Remove two screws securing rear of chassis to baseboard.
9. The chassis is now free to slide backwards from the two studs locating the front.

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## ALIGNMENT INSTRUCTIONS

If alignment is necessary, the following sequence of operations should be followed carefully. A tuneable calibrated signal generator should be used, and **its output must always be limited, so that the receiver output is only just audible.** The signal should be fed to the receiver via a dummy aerial. For I.F. use a 0.1 mfd condenser. If an all-wave dummy aerial is not available, the following may be used :— For S.W., a 400 ohms resistor and a 400 pF condenser in series ; for M.W. and L.W. a standard dummy aerial which may consist of a 200 pF condenser, 25 ohms resistor, and a 25 microhenrys inductance in series.

## ALIGNMENT PROCEDURE CONTD.

### INTERMEDIATE FREQUENCY (470 Kc/s)

1. Apply modulated signal from generator via 0.1 mfd Condenser to fixed vanes of R.F. section of gang condenser and chassis.
2. Switch receiver to M.W. with gang fully opened.
3. Adjust dust cores of I.F. transformers for maximum output in normal manner.

### INTERMEDIATE FREQUENCY TRAP

1. Apply signal generator output (470 Kc/s) via dummy aerial to aerial and earth sockets of receiver.
2. Switch receiver to M.W. with gang condenser fully open, adjust dust core of I.F. trap for minimum output.

### RADIO FREQUENCY ALIGNMENT

NOTE : Connect Signal Generator via dummy aerial to aerial and earth sockets of receiver. Switch receiver to required band and adjust signal generator to desired frequency. Load output transformer secondary with 3.0 ohms. Set volume control to maximum. With gang fully closed, set pointer to 100 degree position on scale.

### LONG WAVE

1. Set pointer to 160 Kc/s calibration mark. Adjust oscillator and then aerial dust cores for maximum output.
2. Set pointer to 300 Kc/s calibration mark. Adjust oscillator and then aerial trimmers for maximum output.
3. Repeat (1), (2), (1).
4. Check calibration at specified frequencies.

### MEDIUM WAVE

1. Set pointer to 575 Kc/s calibration mark. Adjust oscillator and then aerial dust cores for maximum output.
2. Set pointer to 1,500 Kc/s calibration mark. Adjust oscillator and then aerial trimmers for maximum output.
3. Repeat (1), (2), (1).
4. Check calibration at specified frequencies.

### SHORT WAVE

1. Set pointer to 7.5 Mc/s calibration mark. Adjust oscillator and then aerial dust cores for maximum output.
2. Set pointer to 15.0 Mc/s calibration mark. Adjust oscillator and then aerial trimmers for maximum output.
3. Repeat (1), (2), (1).
4. Check calibration:

## GENERAL NOTES

- Oscillator Frequency. The oscillator is at a higher frequency on all bands.
- Sealing. All trimmers to be sealed in normal manner.
- Pulling.** There may be a slight tendency to "pulling" on short waves. When adjusting aerial trimmer at 15.0 Mc/s "rock" the tuning condenser.
- Calibration Check Frequencies.**  
L.W. : 160 Kc/s ; 200 Kc/s ; 300 Kc/s.  
M.W. : 575 Kc/s ; 1,025 Kc/s ; 1,500 Kc/s.  
S.W. : 7.5 Mc/s ; 10.0 Mc/s ; 15.0 Mc/s.
- Calibration Error.**  
L.W. Alignment frequencies—Thickness of pointer. Check point— $\frac{5}{32}$  in.  
M.W. Alignment frequencies—Thickness of pointer. Check point— $\frac{3}{32}$  in.  
S.W. Alignment frequencies— $\frac{1}{16}$  in. Check point— $\frac{1}{8}$  in.

## Iron Dust Cores.

With one exception, the dust cores of all oscillator and aerial coils are to be adjusted to the **second** tuneable signal when the dust cores are screwed into the coil from the top of the former.

The exception is the S.W. oscillator coil. On this band, the iron dust core is to be adjusted to the **first** tuneable signal when the dust core is screwed into the coil from the top of the former.

## REPLACEMENT PARTS

R.159630	Choke Smoothing.
R.590022	Cleat Fibre.
R.142506	Clip Elec. Cond. + M.E.
R.142577	Clip Cable.
R.142583	Clip Coil Mtg.
R.142533	Clip Scale Glass Mtg.
R.142502	Clip Idler Pulley
R.142504	Clip Control Knob.
RA.430389	Coil L.W. Aerial.
RA.430380	Coil M.W. Aerial.
RA.430391	Coil S.W. Aerial.
RA.430399	Coil L.W. Osc.
RA.430400	Coil M.W. Osc.
RA.430401	Coil S.W. Osc.
RA.430388	Coil I.F. Trap.
R.301508	Core Iron Dust.
R.125557	Drum Drive.
R.172531	Escutcheon Gram Light Cover.
R.172512	Escutcheon Magic Eye.
R.164532	Grommet, Chassis Bkt.
R.164528	Grommet, Gang Mtg.
R.157522	Holder, Pilot Lamp.
R.121511	Holder, Valve B8A.
R.121525	Holder, Valve B9A.
R.175605	Knob, W/Change.
R.175608	Knob, Volume.
R.175607	Knob, Tone/On/Off.
R.175606	Knob, Tuning.
R.201507	Lamp, Pilot.
R.138634	Panel, A. E.

R.138635	Panel, P. U.
R.138636	Panel, L.S.
R.138637	Panel, Voltage Selector.
R.138586	Panel, Ae.E. & Ext. L.S.
R.138501	Plug, Voltage Selector.
RA.407026	Pointer & Carriage.
R.125566	Pulley Idler.
R.126650	Scale Glass.
M.86003	Sleeve Rubber No. 5 × $\frac{3}{4}$ (P.L.).
R.138603	Socket Octal with Cover.
R.190558	Speaker 12 in. P.M. 10,000 Lines.
R.125576	Spindle, Drive.
R.122503	Spring, Drive Cord.
R.590020	Strip, Rubbazote (M. Eye Mtg.).
R.153568	Switch (W./Ch.).
RA.415031	Trans. I.F. 1 & 2.
R.159632	Trans. O.P.T. 7,000 Ω to 3 Ω.
R.159633	Trans. Mains.
R.165504	Washer Felt (Large).
R.165505	Washer Felt (Small).

## RESISTORS.

Part No.	Value	Tol. + %	Wattage	Circuit Ref. R.
R10.27310	27K	10	1	6
R08.47310	47K	10	$\frac{1}{2}$	3
R08.10210	1K	10	$\frac{1}{2}$	19
R08.22110	220 Ω	10	$\frac{1}{2}$	25
R09.12520	1.2M	20	$\frac{1}{4}$	17
R09.47420	470K	20	$\frac{1}{4}$	18, 23
R09.33420	330K	20	$\frac{1}{4}$	2
R09.27420	270K	20	$\frac{1}{4}$	13, 14
R09.10410	100K	10	$\frac{1}{4}$	7
R09.10420	100K	20	$\frac{1}{4}$	1, 20, 22
R09.47310	47K	10	$\frac{1}{4}$	5
R09.47320*	47K	20	$\frac{1}{4}$	—
R09.12320	12K	20	$\frac{1}{4}$	8
R09.10320	10K	20	$\frac{1}{4}$	24
R09.18210	1.8K	10	$\frac{1}{4}$	16
R09.47110	470 Ω	10	$\frac{1}{4}$	26
R09.27110	270 Ω	10	$\frac{1}{4}$	9
R09.15110	150 Ω	10	$\frac{1}{4}$	4
R09.27010	27 Ω	10	$\frac{1}{4}$	15
R.158639	1M	On/Off Vol.	—	11
R.158642	$\frac{1}{4}$ M	S.P.S.T. Tone	—	21

## CAPACITORS.

Part No.	Value	Tol. + %	Wkg. V.	Cir. Ref.
R.130522	20 pF	20	—	3
R.129527	50 pF	10	—	14
R.130521	65 pF	5	—	10
R.129535	100 pF	10	—	9
R.130520	150 pF	1	—	11
R.129685*	200 pF	10	—	4
R.129616	500 pF	10	—	1
R.130519	500 pF	1	—	12
R.129538	1500 pF	2	—	13
R.129815	.001 μF	10	—	2
R.130560	.002 μF Ceramic	—	—	16, 21, 23
R.129748	.005 μF P.T.	—	—	25
R.129701	.01	—	500 V.	22
R.129740	.1	—	350 V.	6, 15, 17
R.131616	32-32-8 μF	350 V. Elec. Cond.	—	E.C. 2, 3, 5
R.131609	25 μF	25 V. Elec. Cond.	—	E.C. 1, 4
R.217500*	C. & R. Network	—	—	—
R.128516	3 × 4 to 40 pF Trimmer	—	—	V.C. 1-3 6-8
R.127521	2 Gang Variable	—	—	V.C. 4, 5

\* R.217500 may be replaced by :—  
R09.47320 1 off.  
R.129685 2 off.