

**General Description :** Five-valve (including rectifier), three-waveband superheterodyne table receiver. Released April 1946. Price £14 16s. 3d. (plus tax).

**Power Supply :** A.C. mains, 200-255 volts, 40-100 c/s.

**Wavebands :** S.W. 16-52 m. (18.7-5.75 Mc/s.); M.W. 193-575 m. (1550-520 kc/s.); L.W. 800-2100 m. (376-143 kc/s.).

**Dial Light :** 8 volts, 0.3 amp.

**Ext. Loudspeaker :** Impedance 3 ohms.

**Intermediate Frequency :** 465 kc/s.

**Alignment Procedure :**

**I.F. :** Short-circuit oscillator section of tuning gang. Inject 465-kc/s. signal to top cap of V<sub>1</sub> via 0.1- $\mu$ F. capacitor, and adjust iron cores of I.F. transformers in following order; second I.F.T. secondary, second I.F.T. primary, first I.F.T. secondary, first I.F.T. primary, progressively reducing the input as sensitivity increases.

**I.F. filter :** Inject strong 465-kc/s. signal to aerial and earth sockets via dummy aerial and adjust core of L<sub>1</sub> for minimum response.

**S.W. :** Set pointer to 18 Mc/s. and inject signal of that frequency; adjust C<sub>17</sub> and C<sub>4</sub> for maximum response.

**M.W. :** Set pointer to 213 m., inject 1400-kc/s. signal and adjust C<sub>18</sub> then C<sub>5</sub> for maximum response.

**L.W. :** Set pointer to 1000 m., inject 300-kc/s. signal and adjust C<sub>19</sub> then C<sub>6</sub> for maximum response.

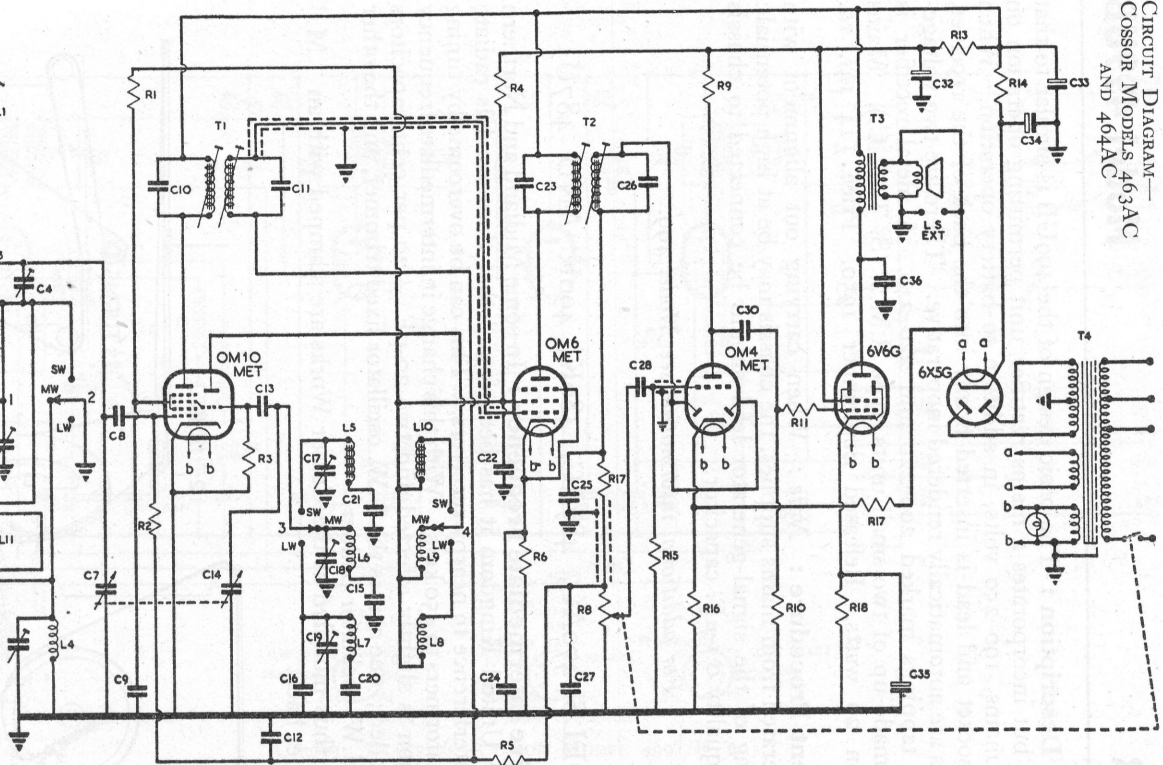
**Valve Analysis :** Measurements taken with popular testmeter and should be considered as approximate. Receiver tuned to 320 m. with no-signal conditions. Chassis negative. Unsmoothed H.T. 370 volts, smoothed H.T. 290 volts, total H.T. current 57 mA.

		Anode		Screen		Cathode
V <sub>1</sub> (Osc.)	OM10 —	280 v. 103 v.	3.6 mA. 6.0 mA.	95 v. —	1.5 mA. —	— —
V <sub>2</sub>	OM6	280 v.	3.0 mA.	103 v.	1.0 mA.	3.5 v.
V <sub>3</sub>	OM4	53 v.	1.5 mA.	—	—	—
V <sub>4</sub>	6V6G	266 v.	35 mA.	220 v.	2.4 mA.	10 v.
V <sub>5</sub>	6X5G	350 A.C.	each anode	—	—	—

## Component Values :

C <sub>1</sub>	225 pF.	C <sub>20</sub>	185 pF.	C <sub>33</sub>	8	R <sub>7</sub>	47k
C <sub>2</sub>	500 pF.	C <sub>21</sub>	0.005	C <sub>34</sub>	8	R <sub>8</sub>	500k
C <sub>3</sub>	5 pF.	C <sub>22</sub>	0.1	C <sub>35</sub>	25	R <sub>9</sub>	100k
C <sub>8</sub>	300 pF.	C <sub>23</sub>	100 pF.	C <sub>36</sub>	0.01	R <sub>10</sub>	470k
C <sub>9</sub>	0.01	C <sub>24</sub>	0.01	R <sub>11</sub>		R <sub>11</sub>	100k
C <sub>10</sub>	100 pF.	C <sub>25</sub>	100 pF.	R <sub>12</sub>	2.2k	R <sub>13</sub>	3.9k
C <sub>11</sub>	100 pF.	C <sub>26</sub>	100 pF.	R <sub>2</sub>	330k	R <sub>14</sub>	1.5k
C <sub>12</sub>	0.1	C <sub>27</sub>	100 pF.	R <sub>3</sub>	15k	R <sub>15</sub>	4.7M
C <sub>13</sub>	100 pF.	C <sub>28</sub>	0.005	R <sub>4</sub>	10k	R <sub>16</sub>	100
C <sub>15</sub>	570 pF.	C <sub>30</sub>	0.01	R <sub>5</sub>	2.2M	R <sub>17</sub>	220
C <sub>16</sub>	50 pF.	C <sub>32</sub>	8	R <sub>6</sub>	1k	R <sub>18</sub>	270

CIRCUIT DIAGRAM—  
 COSSOR MODELS 463AC  
 AND 464AC



- L1 4.3 ohms
- L2 Very low
- L3 Very low
- L4 29 ohms
- L5 Very low
- L6 2.1 ohms

- L7 14.3 ohms
- L8 7.8 ohms
- L9 1.1 ohms
- L10 29.5 ohms
- L11 Very low

- T1 and T2
- T3 (primary)
- T3 (secondary)
- T4 (primary)
- T4 (H.T. secondary)

- 9.5 ohms
- 354 ohms
- Very low
- 47 ohms
- 1400 ohms

- In early models
- C1 200 p.f.
  - C2 500 p.f.
  - C25 500 p.f.
  - C27 500 p.f.
  - C28 15k
  - C47 15k
  - R6 470

