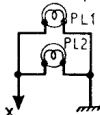
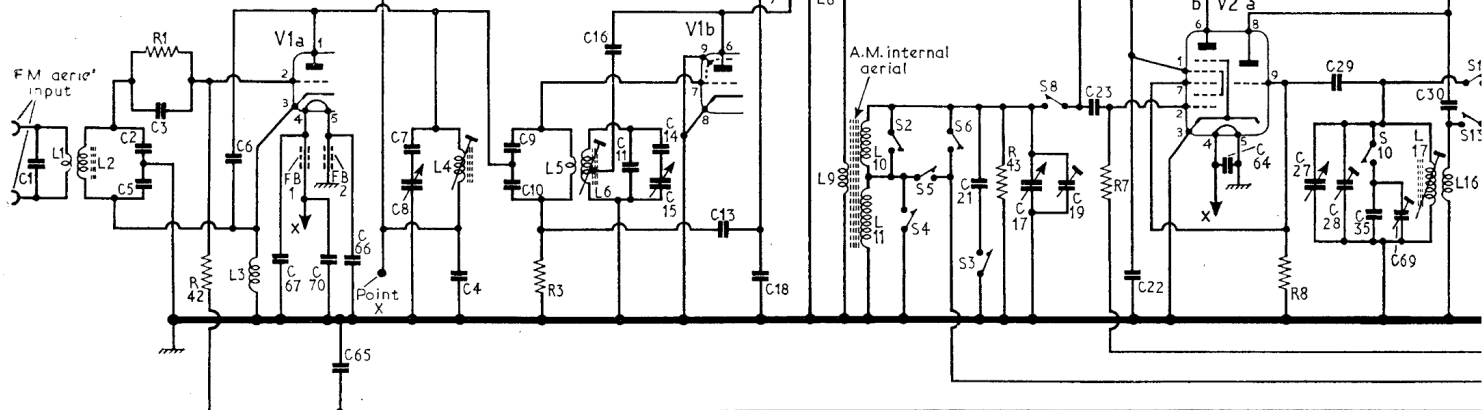


C	1	2,5,3	6	67	70,65,66	7,8	4	9,10	12	16,11,14,15	13	18	20	21	17	19	23	22	24,25,26,64	32,31,27,29,28,35,69	30
R	1	42	2	3	5	4	43	7	6	9	8	10									

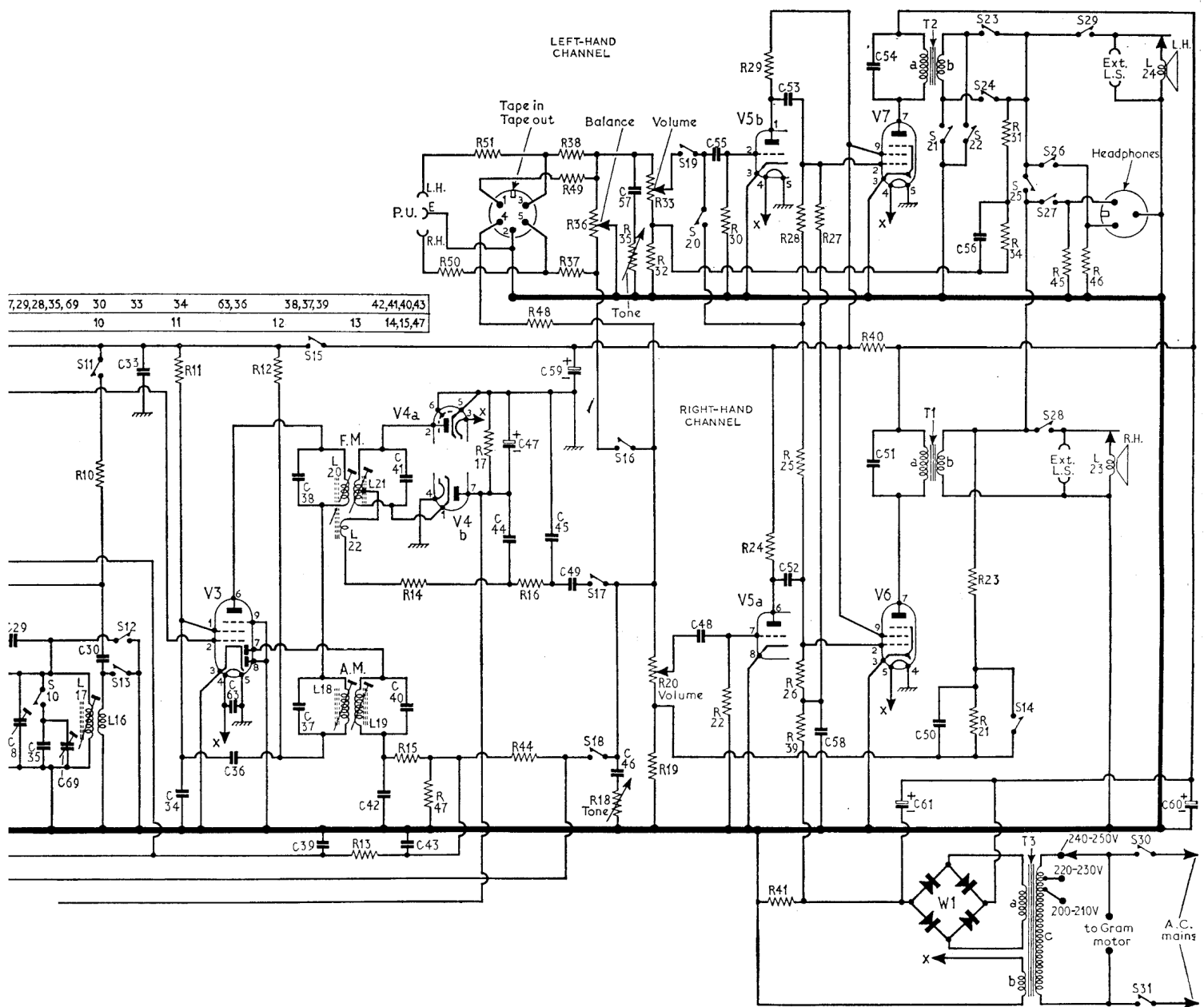
Scale lamps



FERGUSON - 530



47,44	45,49,59	46	57	48	55	52,53	58	54,51,61	50	56	60	C
50	17,51	44,16,48,38,49,37,36,18,35,33,32,19,20,30,22	29,24	41,28,25,26,39,27,40	23,21	31,34	45	46				R



Resistors				Capacitors			
R1	680kΩ	R30	6-8MΩ	C1	47pF	C31	220pF
R2	2-2kΩ	R31	680Ω	C2	15pF	C32	12pF
R3	680kΩ	R32	47Ω	C3	220pF	C33	0-02μF
R4	1-5kΩ	R33	1MΩ	C4	1,500pF	C34	3,900pF
R5	6-8kΩ	R34	1-5kΩ	C5	47pF	C35	315pF
R6	33kΩ	R35	1MΩ	C6	7pF	C36	0-01μF
R7	2-2MΩ	R36	1-5MΩ				
R8	47kΩ	R37	470kΩ				
R9	2-7kΩ	R38	470kΩ				
R10	27kΩ	R39	560kΩ				
R11	47kΩ	R40	1-2kΩ				
R12	3-3kΩ	R41	100Ω				
R13	2-2MΩ	R42	1-5MΩ				
R14	220Ω	R43	470kΩ				
R15	100kΩ	R44	470kΩ				
R16	100kΩ	R45	3Ω				
R17	27kΩ	R46	3Ω				
R18	1MΩ	R47	330kΩ				
R19	47Ω	R48	2-2MΩ				
R20	1MΩ	R49	2-2MΩ				
R21	1-5kΩ	R50	100kΩ				
R22	6-8MΩ	R51	100kΩ				
R23	630Ω						
R24	220kΩ						
R25	1MΩ						
R26	680kΩ						
R27	680kΩ						
R28	1MΩ						
R29	220kΩ						

Transformers*

T1	{ a 300 }
	{ b — }
T2	{ a 300 }
	{ b — }
T3	{ a 100 }
	{ b — }
	{ c 34 }

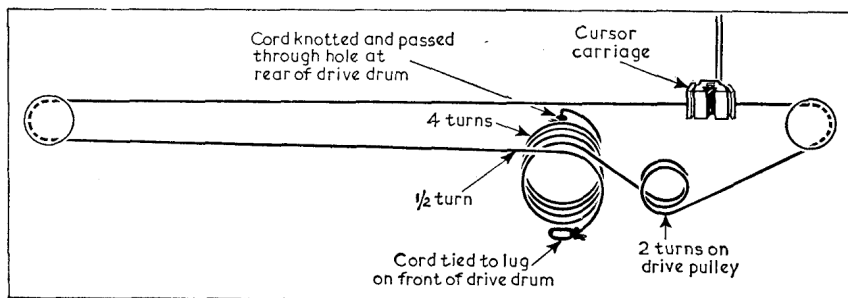
Miscellaneous

PL1, PL2, 6-5V 0-3A
W1
FB1
FB2
S1-S25
S26-S29
S30, S31

*Approximate d.c. res.

†No component.

Valve	Anode (V)	Screen (V)	Cathode (V)
V1 ECC85	198V at junction R2, R5	—	—
V2 ECC81	200	75	—
V3 EBF89	185	79	—
V4 EB91	100	—	—
V5 ECC83	100	—	—
V6 EL84	255	212	—
V7 EL84	255	212	—



Scale drive assembly seen from the front with the tuning gang fully closed. Approximately 4½ feet of cord is required for a replacement drive.

CIRCUIT ALIGNMENT

Equipment Required.—An a.m. signal generator modulated 30%; an output meter; an r.f. coupling loop for alignment of the a.m. aerial circuits; an f.m. signal generator with 25kc/s deviation at an output impedance of 75Ω and also capable of supplying a 30% modulated signal at 10.7Mc/s; two capacitors (0.01μF and 400pF) and a hexagonal trimming tool for the i.f. coil cores, specially shaped to allow the bottom core to be adjusted through the top core in the case of formers which contain two cores.

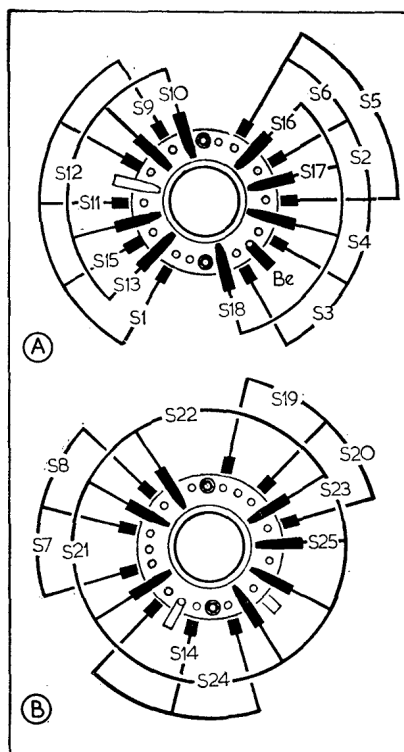
A.M. Circuits

- 1.—Switch receiver to m.w., turn the tuning gang to the minimum capacitance position and the volume control to maximum output. Connect the output meter across the loudspeaker terminals and connect the a.m. signal generator via the 0.01μF capacitor to the control grid of V2 mixer section.
- 2.—Feed in a 470kc/s modulated signal and adjust L19, L18, L15 and L14 (location reference C2) for maximum output.
- 3.—Disconnect the signal generator from V2b grid and connect its output across the r.f. coupling loop, with the loop loosely coupled to the ferrite rod aerial. With the tuning gang at maximum capacitance check that the cursor coincides with the "zero" mark on the edge of the scale diffuser.
- 4.—Tune receiver to 517m (if out of the cabinet, tune to the 517m calibration mark on the edge of the scale diffuser). Feed in a 580kc/s signal and adjust L17 (B1) and L10 (B3) for maximum output. Adjust L10 by sliding the tuning ring along the ferrite rod.
- 5.—Tune receiver to 205m (mark on scale diffuser), feed in a 1,460kc/s signal and adjust C28 (B2) and C19 (B2) for maximum output.
- 6.—Switch receiver to l.w. and feed in a 220kc/s signal. Tune receiver to this signal, then adjust C69 (C1) and L11 (A3) for correct calibration and maximum output.

F.M. Circuits

Throughout the alignment of the f.m. circuits the input signal should be adjusted to maintain an audio output of approximately 100mW.

- 1.—Switch receiver to f.m. and allow a ten-minute warm-up period. Set the volume control 90 deg. back from maximum output and set the tone control to maximum treble. Connect the signal generator via the 400pF capacitor to the mixer control grid of V2.
- 2.—Feed in a 10.7Mc/s f.m. signal and adjust L20, L21, L13 and L12 (location reference C2) for max. output.
- 3.—Switch the signal generator to a.m., feed in a 10.7Mc/s modulated signal and adjust L21 for minimum output. Then feed in a 10.7Mc/s f.m. signal and check that the f.m. output has not reduced. If maximum a.m. rejection does not coincide with maximum f.m. output, adjust L21 for maximum a.m. rejection at the expense of output.
- 4.—Unscrew the core of L8 (A2) until it protrudes from the former by approximately ¼ in. Connect the signal generator to point X (A2).
- 5.—Feed in a 10.7Mc/s f.m. signal and adjust L7 (A2) for maximum output, then peak L8.
- 6.—Fully close the tuning gang and check that the cursor coincides with the "zero" mark on the edge of the scale diffuser, then tune to 91Mc/s on scale.
- 7.—Connect the signal generator to the f.m. aerial sockets. Feed in a 91Mc/s signal and adjust L6 (A2) to tune receiver to this signal. If two peaks occur, select the one with the core nearer the top of the former.
- 8.—Adjust L4 for maximum audio output with the core towards the bottom of the former.



Waveband switch wafers drawn as they appear when looking at the chassis from the rear; section A being the front (or inner) wafer.