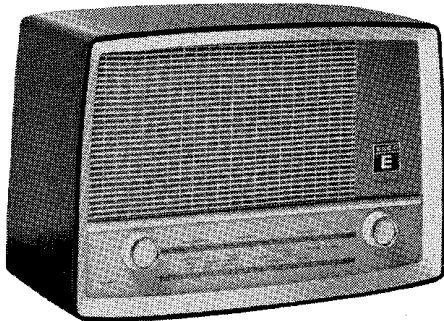


# EKCO

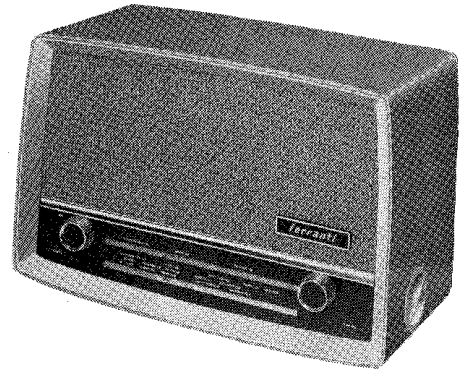
# FERRANTI



**Model A455**

## SERVICE SHEET

### TRANSISTOR TABLE RECEIVERS



**Model A1149**

#### Audio Adjustment

Use output meter switched to 15 ohms. Immediate damage to VT3 & VT4 will result if a lower value is used.

1. Set RV2 and RV3 to mid-position.
2. Insert Avo lead in collector of VT4 (AC.176) and set RV3 to give current of 10mA (Avo on 100mA range).
3. Apply audio to top of volume control and oscilloscope to output across 15 ohms load, with Avo switched to 10 amp range and volume control at maximum. Increase input until 'clipping' is apparent. Adjust RV2 until both peaks 'clip' at similar amplitudes.
4. Reduce input to zero and repeat 2, making any further adjustment required to RV3.
5. Remove Avo and solder VT4 lead.

#### I.F. Module

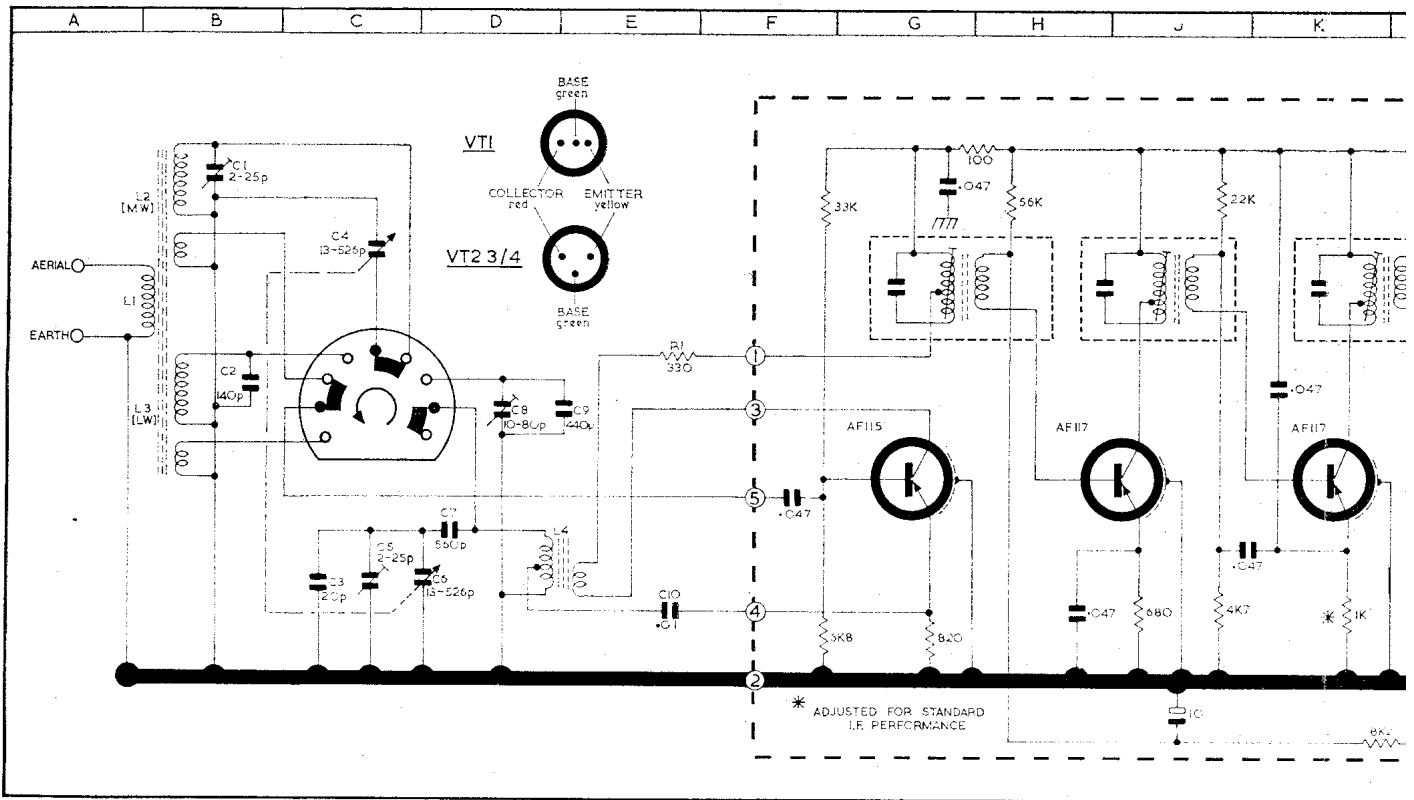
The Ekco A455 & Ferranti A1149 receivers contain an I.F. Module type LP 1156 (part no. FU 00101), which is pre-tuned and will not normally require to be adjusted.

In the event of any component failure within this Module, it should be removed and returned to Radio & Television Services Ltd., Cambridge for replacement.

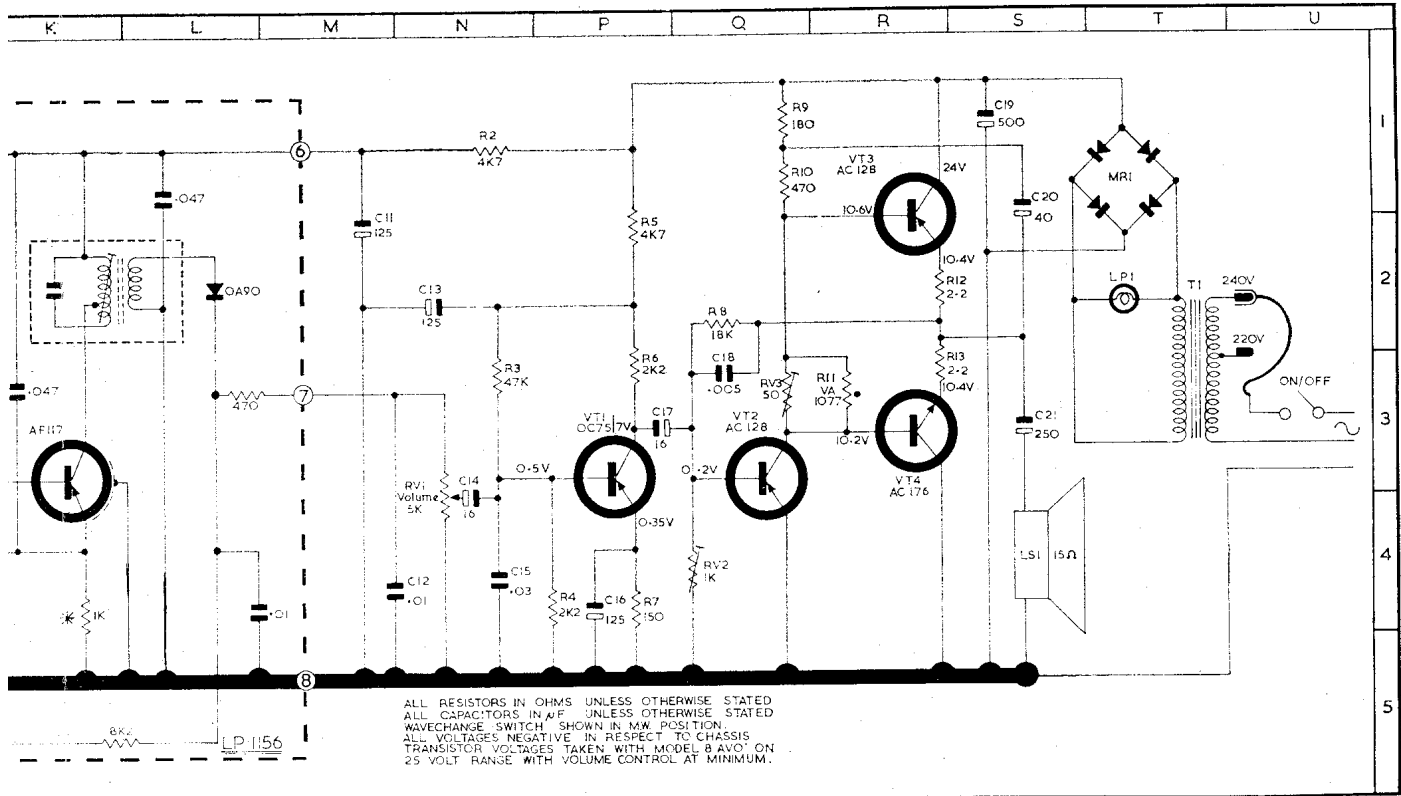
#### R.F. Alignment

Apply signal as below:—	Set controls to:—	Adjust as follows:—
1. 600 kc/s. to rod aerial via search coil at 11in. from centre of rod.	M.W. 500 metres	Core of L4 and position of L2 on ferrite rod.
2. As 1, but 1400 kc/s.	M.W. 214 metres	Trimmers C5 and C1.
3. Check tracking and calibration. Seal position of L2.		
4. As 1, but 214.3 kc/s.	L.W. 1400 metres	Trimmer C8 and position of L3 on ferrite rod.
5. Check tracking and calibration. Seal position of L3.		

**Note:** Before carrying out R.F. Alignment, ensure that pointer coincides with datum marks at low frequency end of tuning scale when gang is fully meshed.



RESISTORS						COILS & TRANSFORMERS				MISC	
Code No.	Value in Ohms	Tol. ±%	Fig.	Part No.		Code No.	Description	Fig.	Part No.	Code No.	Description
R1	330	...	10	1	NG 33110	T1	Mains Transformer	...	PL 00259	LS1	Loudspeaker; 7in. x
R2	4K7	...	10	3	NG 47210	L1	Aerial Coupling Coil	...	AN 01889	SW	Wavechange Switch
R3	47K	...	10	3	NG 47310	L2	M.W. Aerial Coil	...	AN 01838		Audio Board Panel
R4	2K2	...	10	3	NG 22210	L3	L.W. Aerial Coil	...	AN 01839	LP1	Pilot Lamp 24v 2.8
R5	4K7	...	10	3	NG 47210	L4	M.W./L.W. Oscillator Coil	1	AN 02165		Pilot Lamp Holder
R6	2K2	...	10	3	NG 22210						Drive Drum Assem
R7	150	...	10	3	NG 15110						Pointer Assembly
R8	18K	...	10	3	NG 18310						Drive Cord
R9	180	...	10	3	NG 18110						Pulley
R10	470	...	10	3	NG 47110						Drive Spindle
R11	VA 1077	Thermistor		3	PL 23052						Scale Backing Plat
R12	2.2	...	10	3	NB 02210						Drive Drum Spring
R13	2.2	...	10	3	NB 02210						
CAPACITORS						TRANSISTORS					
Code No.	Value & Type	Tol. ±%	Volts	Fig.	Part No.	Code No.	Description	Fig.	Part No.		
C1	2-25 pF Trimmer			1	PV 05129	VT1	OC75 Mullard (Audio)	3	FV 05046		
C2	140 pF Polystyrene	2½	30	1	PQ 09057	VT2	AC128 Mullard (Driver)	3	FV 05117		
C3	20 pF Polystyrene	2½	30	1	PQ 05506	VT3	AC128 Mullard (Output)	3	FV 05124		
C4	Gang Condenser				PV 00022	VT4	AC176 Mullard (Output)	3	FV 05124		
C5	2-25 pF Trimmer			1	PV 05129						
C6	Gang Condenser				PV 00022						
C7	560 pF Polystyrene	2½	30	1	PQ 11756						
C8	10-80 pF Trimmer			1	PV 05008						
C9	440 pF Polystyrene	2½	30	1	PQ 11300						
C10	.01 µF Mylar	10	100	1	PQ 25022						
C11	125 µF Lemco SM-E		12	3	PS 38209						
C12	.01 µF Mylar	10	100	2	PQ 25022						
C13	125 µF Lemco SM-E		16	3	PS 38211						
C14	16 µF Lemco SM-C		12	3	PS 25090						
C15	.03 µF Mylar	10		3	PQ 28005						
C16	125 µF Lemco SM-E		6	3	PS 38212						
C17	16 µF Lemco SM-C		12	3	PS 25090						
C18	.005 µF Mylar	10		3	PQ 21006						
C19	500 µF Electrolytic		30	3	PS 46066						
C20	40 µF Lemco SM-E		15	3	PS 30022						
C21	250 µF Lemco SC-1		15	3	PS 41033						
						VARIABLE RESISTORS					
Code No.	Value & Type			Fig.	Part No.	Code No.	Description	Fig.	Part No.		
RV1	5K Potentiometer (Volume)				PL 00259						
RV2	1K Egen 468 (Pre-set)				PL 00349						
RV3	50 Egen 286 (Pre-set)				PL 00383						
<b>MISCELLA</b>											
Description											
Cabinet (Charcoal Grey)											
Cabinet (Cream/White)											
Cabinet (Maroon/White)											
Cabinet (Primrose/White)											
Knob Assembly											
Wavechange Knob Assembly											
Wavechange Knob Assembly											
Wavechange Knob Assembly											
Styling Strip											
Symbol; Ekco											
Baffle Assembly											
Scale											
Backcover											
Styling Panel											
Base Cover											



MISCELLANEOUS	
Description	Part No.
Speaker; 7in. x 3½in. 15 ohm ...	FS 10063
Wavechange Switch Panel Assembly ...	AJ 01395
I/O Board Panel Assembly ...	AJ 01394
24V Lamp 24v 2.8 watts ...	FL 15100
Lamp Holder ...	FH 03028
Volume Drum Assembly ...	AJ 01446
Control Panel Assembly ...	AJ 01448
Power Cord ...	BL 00038
Spindle ...	BG 10448
Back Plate ...	BB 00522
Back Plate ...	BD 01435
Volume Drum Spring ...	FS 18030

MISCELLANEOUS (casing)		
Description	A455 Part No.	A1149 Part No.
Case (Charcoal Grey)	—	BH 00821
Case (Cream/White)	BH 00819	—
Case (Cinnamon/White)	BH 00820	—
Case (Crimson/White)	—	BH 00822
Case (Black)	BH 00233	BH 00235
Control Knob Assembly	AJ 01504	—
Control Knob Assembly (White)	—	AJ 01500
Control Knob Assembly (Black)	—	AJ 01503
Control Knob Assembly (White)	EA 56473	EA 56466
Control Knob Assembly (Black)	AK 02002	—
Control Knob Assembly (White)	AJ 01365	AJ 01478
Control Knob Assembly (Black)	EB 03159	EB 03178
Control Knob Assembly (White)	EB 03599	EB 04810
Control Knob Assembly (Black)	EB 02744	—
Control Knob Assembly (White)	EB 04802	EB 04802

**Intermediate Frequency:**

470 kc/s.

**Waveband Coverage:**

M.W. 182 - 580 metres (1650 - 515 kc/s.).

L.W. 1100 - 2000 metres (275 - 150 kc/s.).

**Consumption:**

5—10 watts.

**Mains Supply:**

200 - 250 volts A.C. 50/60 cycles A.C.

The Voltage adjustment must be correctly set before connecting to the mains. Serious damage may result if this is not correctly carried out.

**CHASSIS REMOVAL**

1. Remove back cover.
2. Turn wavechange switch to 'Medium' and slacken grub screw.
3. Slacken the two grub screws on front controls, then pull-off all knobs.
4. Unsolder the leads from loudspeaker.
5. Remove the self-tapping screws on either side of the chassis, when the chassis may be withdrawn.

**IMPORTANT:** This set is not suitable for use with an extension loudspeaker. No attempt should be made to connect one as serious damage could result.

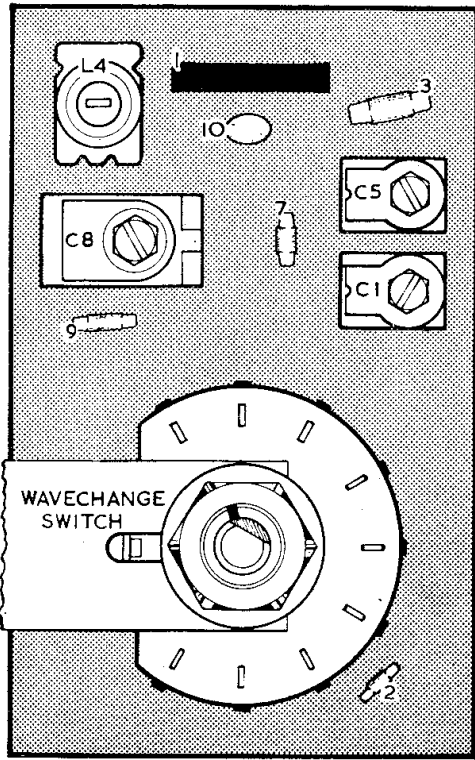


Fig. 1

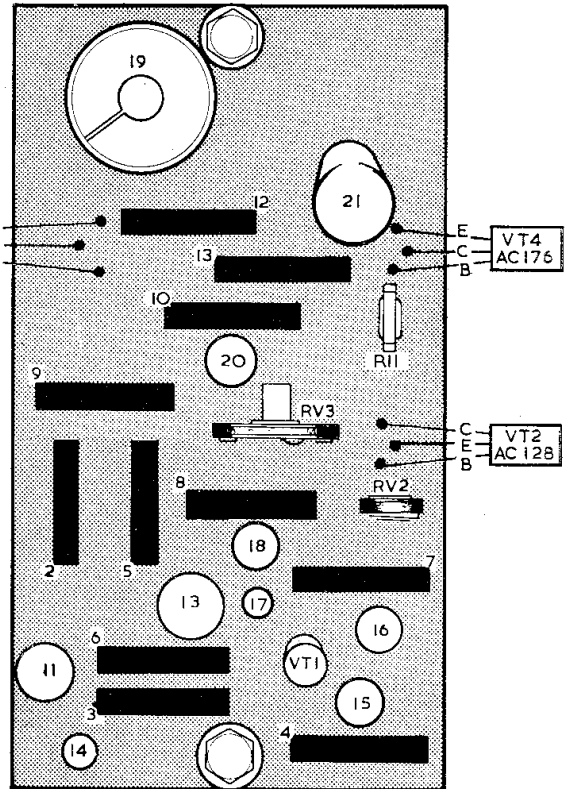


Fig. 3

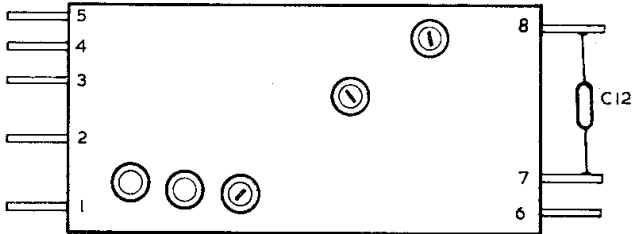


Fig. 2

NOTE: In some earlier models the print panel coding for C11 and C13 is incorrect.

DRIVE CORD VIEWED FROM REAR OF CHASSIS

NOTE TURNS ON DRIVE SPINDLE

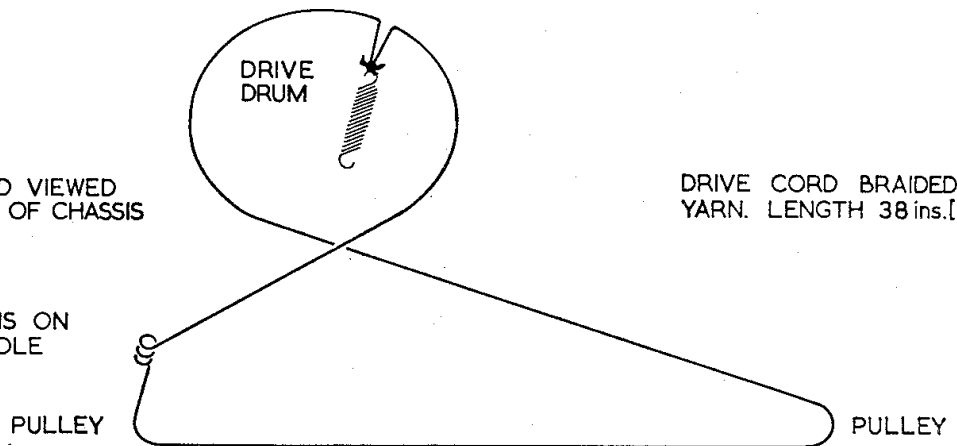


Fig. 4