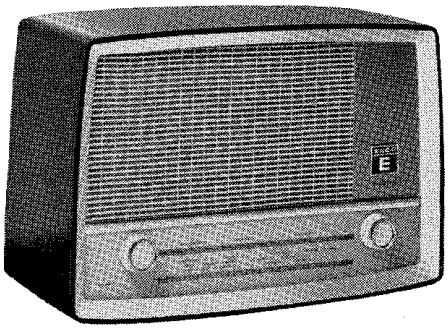
EKCO FERRANTI



SERVICE SHEET

TRANSISTOR TABLE RECEIVERS

Model A455 **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

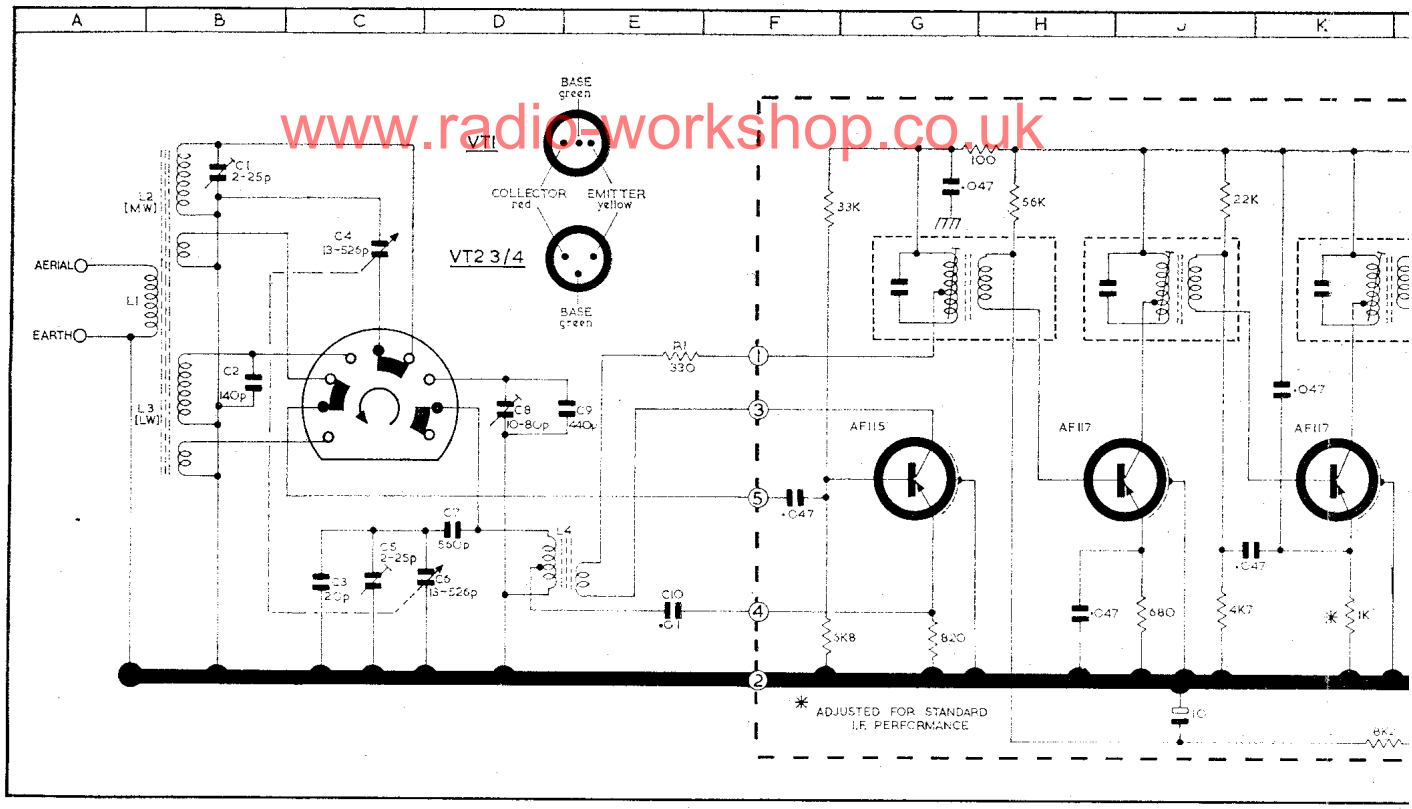
The Ekco A455 & Ferranti A1149 receivers contain an I.F. Module type LP 1156 (part no. FU 00101), which is pre-tuned and will not normally require to be adjusted.

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

Code No.	Value in Ohms	Tol. ±%	Fig.	Part No.
R1	330	10	1	NG 33110
R2	4K7	10	3	NG 47210
R3	47K	10	3	NG 47310
R4	2K2	10	3	NG 22210
R5	4K7	10	3	NG 47210
R6	2K2	10	3	NG 22210
R7	150	10	3	NG 15110
R8	18K	10	3	NG 18310
R9	180	10	3	NG 18110
R10	470	10	3	NG 47110
R11	VA 1077 Thermistor		3	PL 23052
R12	2.2	10	3	NB 02210
R13	2.2	10	3	NB 02210

CAPACITORS

Code No.	Value & Type	Tol. ±%	Volts	Fig.	Part No.
C1	2-25 pF Trimmer			1	PV 05129
C2	140 pF Polystyrene	2½	30	1	PQ 09057
C3	20 pF Polystyrene	2½	30	1	PQ 05506
C4	Gang Condenser				PV 00022
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

COILS & TRANSFORMERS

Code No.	Description	Fig.	Part No.
T1	Mains Transformer		PL 00259
L1	Aerial Coupling Coil		AN 01889
L2	M.W. Aerial Coil		AN 01838
L3	L.W. Aerial Coil		AN 01839
L4	M.W./L.W. Oscillator Coil	1	AN 02165

TRANSISTORS

Code No.	Description	Fig.	Part No.
VT1	OC75 Mullard (Audio)	3	FV 05046
VT2	AC128 Mullard (Driver)	3	FV 05117
VT3	AC128 Mullard (Output)	3	FV 05124
VT4	AC176 Mullard (Output)		

VARIABLE RESISTORS

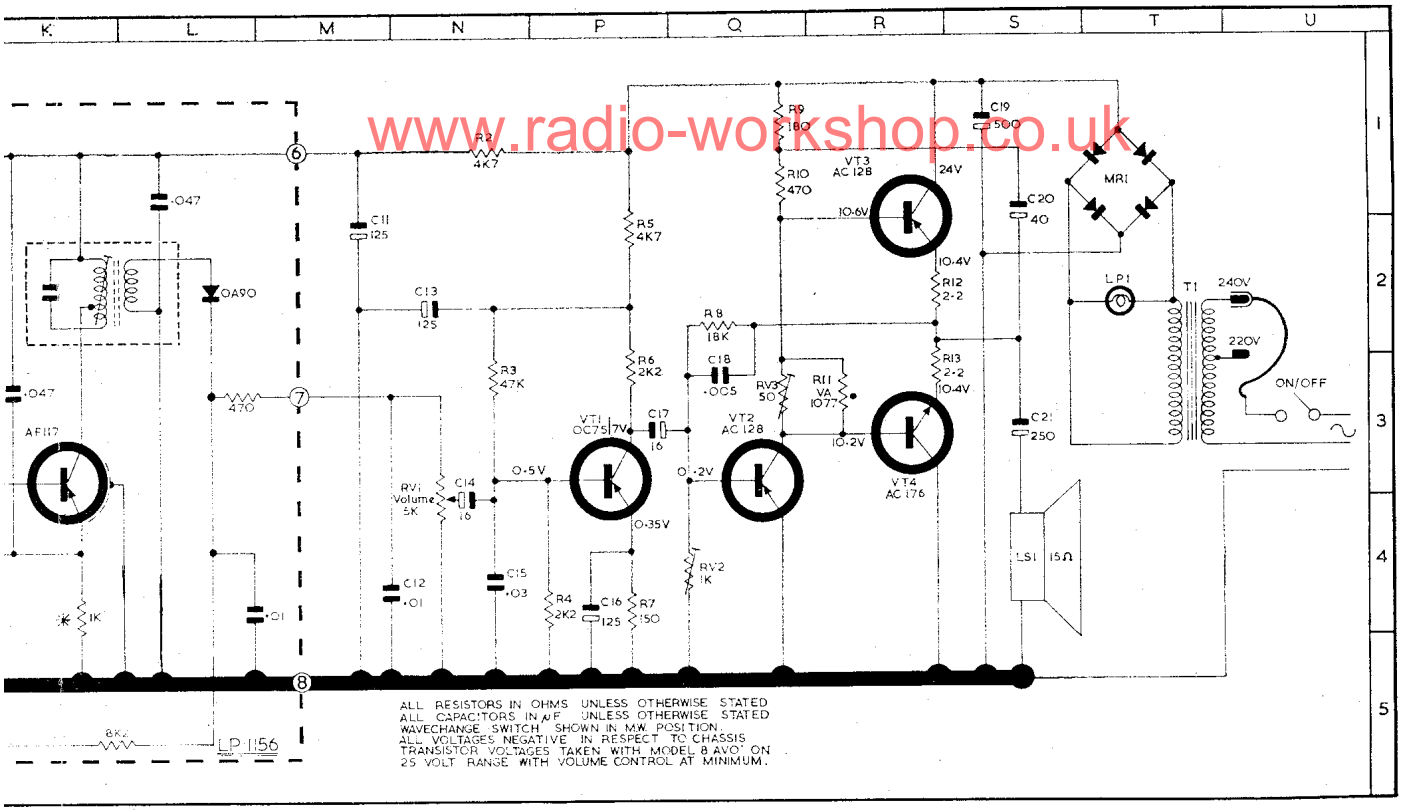
Code No.	Value & Type	Fig.	Part No.
RV1	5K Potentiometer (Volume)		PL 00259
RV2	1K Egen 468 (Pre-set)	3	PL 00349
RV3	50 Egen 286 (Pre-set)	3	PL 00383

MISC

Code No.	Description
LS1	Loudspeaker; 7in. x
SW	Wavechange Switch
	Audio Board Panel
LP1	Pilot Lamp 24v 2.8
	Pilot Lamp Holder
	Drive Drum Assemb
	Pointer Assembly
	Drive Cord ...
	Pulley ... ...
	Drive Spindle ...
	Scale Backing Plat
	Drive Drum Spring

MISCELLA

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.
dspeaker; 7in. x 3⅝in. 15 ohm	FS 10063
vechange Switch Panel Assembly ...	AJ 01395
dio Board Panel Assembly	AJ 01394
ot Lamp 24v 2.8 watts	FL 15100
ot Lamp Holder	FH 03028
ve Drum Assembly	AJ 01446
nter Assembly	AJ 01448
ve Cord	BL 00038
ley	BG 10448
ve Spindle	BB 00522
ıle Backing Plate	BD 01435
ve Drum Spring	FS 18030

MISCELLANEOUS (casing)

otion	A455 Part No.	A1149 Part No.
ıarcoal Grey)	—	BH 00821
ream/White)	BH 00819	—
aroon/White)	BH 00820	—
imrose/White)	—	BH 00822
nbly	BH 00233	BH 00235
Knob Assembly ...	AJ 01504	—
Knob Assembly (White)	—	AJ 01500
Knob Assembly (Black)	—	AJ 01503
... ...	EA 56473	EA 56466
co	AK 02002	—
mbly	AJ 01365	AJ 01478
... ...	EB 03159	EB 03178
... ...	EB 03599	EB 04810
el	EB 02744	—
... ...	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.

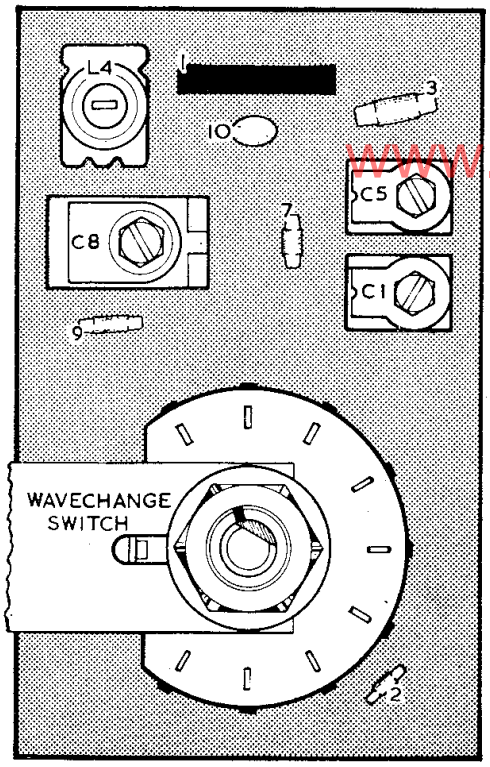


Fig. 1

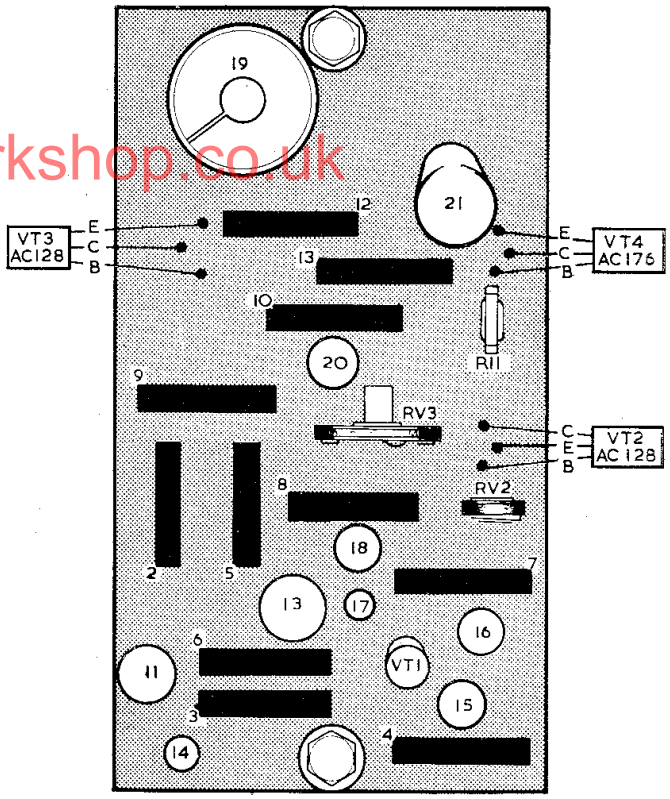


Fig. 3

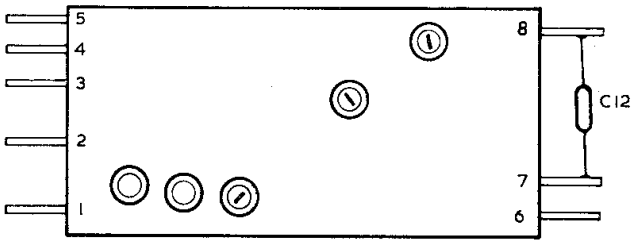


Fig. 2

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

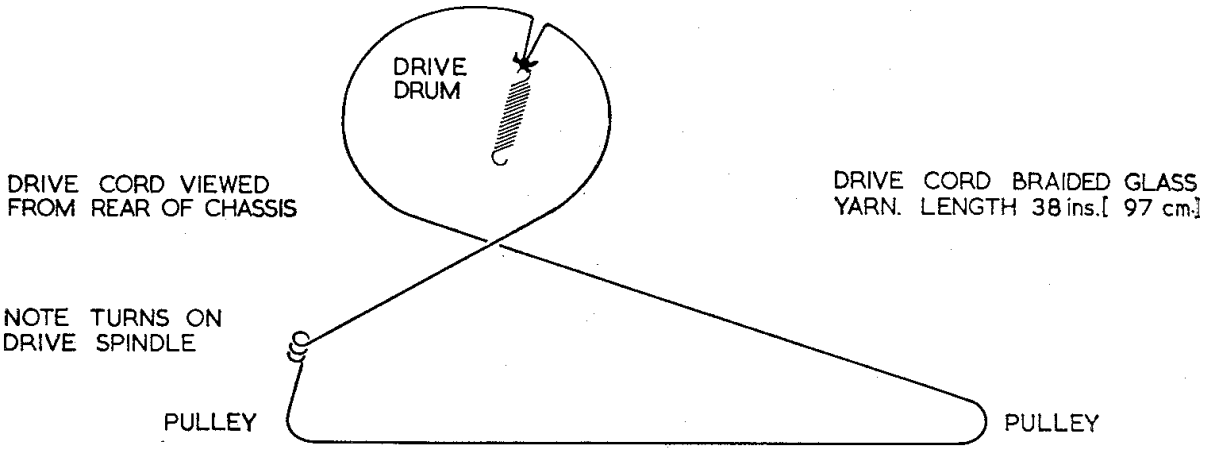


Fig. 4