

MODELS TARG39A • ARG40A • ARG41A

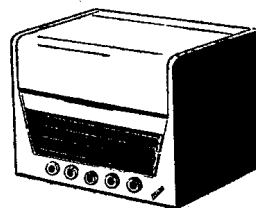
# MARCONI PHONE SERVICE MANUAL

5-VALVE  
3-SPEED AUTO-RADIOGRAMS  
FOR A.C. MAINS

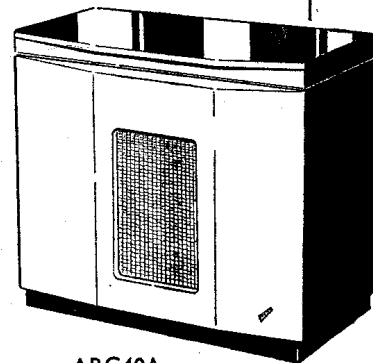
MODELS ARG40A • ARG41A

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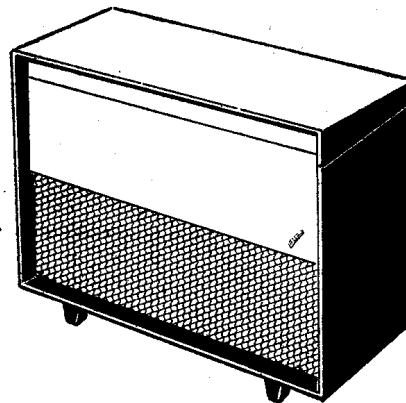
TABLE MODEL TARG39A



TARG39A



ARG40A



ARG41A

THE GREATEST

*Marconi*

NAME IN RADIO

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# MODELS TARG39A, ARG40A and ARG41A

In view of the similarity between these models all information, unless otherwise stated, will apply to the three models.

## SPECIFICATION

### Physical

#### MODEL TARG39A

Height	..	..	..	..	15 $\frac{1}{4}$ inches	} Approx. Overall.
Width	..	..	..	..	18 inches	
Depth	..	..	..	..	16 inches	

#### MODEL ARG40A

Height	..	..	..	..	30 $\frac{3}{4}$ inches	} Approx. Overall.
Width	..	..	..	..	34 inches	
Depth	..	..	..	..	16 inches	

#### MODEL ARG41A

Height	..	..	..	..	30 inches	} Approx. Overall.
Width	..	..	..	..	34 inches	
Depth	..	..	..	..	16 $\frac{3}{4}$ inches	

### Mains Supply and Consumption

195—255 volts A.C., 50 cycles only.

Consumption—50 watts on Radio.  
65 watts on Gram.

### Valves

V1	X148	Frequency Changer.
V2	W148	I.F. Amplifier.
V3	DH149	Detector, A.G.C. and A.F. Amplifier.
V4	N148	Output.
V5	U149	H.T. Rectifier.

### Scale Lamps

Two 6.5 volts, 0.3 amp.

### Rated Output

4.5 watts maximum.

### Wave Ranges

L.W.	..	909—2,143 metres (330—140 kc/s).
M.W.	..	183—577 metres (1,639—519.9 kc/s).
S.W.	..	16.5—51.72 metres (18.19—5.8 Mc/s).

### Intermediate Frequency

470 kc/s.

### Loudspeaker

#### MODEL TARG39A

7-inch permanent magnet moving coil type. The speech coil has a D.C. resistance of 3 ohms and an impedance of 3.5 ohms at 1,000 cycles.

#### MODELS ARG40A and ARG41A

10-inch permanent magnet moving coil type. The speech coil has a D.C. resistance of 3 ohms and an impedance of 3.5 ohms at 1,000 cycles.

### External Loudspeaker

An additional loudspeaker may be connected to the "EXT. L/S" sockets at the rear of the instrument. The loudspeaker used should have an impedance of approximately 5 ohms.

### Auto-Mechanism

Three-speed Auto-Mechanism type "D". For full information, see separate Service Manual.

### Pick-Up

High impedance crystal turn-over cartridge, Acos type HGP37 with replaceable styli.

### Styli

Acos type SE-1 for 78 r.p.m. and SE-2 for 33 $\frac{1}{3}$ /45 r.p.m.

### Motor

Shaded pole induction type.

## INSTALLATION

### The Aerial and Earth

A sheet of foil positioned inside the cabinet acts as an internal plate aerial on the medium and long wavebands, and is intended primarily for the reception of local stations.

To receive a short wave station or when in difficult reception circumstances, *i.e.*, in areas of strong electrical interference or in a steel framed building and whenever it is desired to obtain maximum sensitivity from the receiver, an external aerial must be fitted.

It is essential that an efficient earth is provided. Do not use a telephone earth, hot water pipe or a gas pipe, as an

earth. The aerial and earth leads should be terminated with suitable plugs.

### Transit Packing

Before operating the instrument remove all transit packing. Unscrew to their fullest extent the four nuts securing the mechanism to the motor board. The nuts are prevented from being completely unscrewed by circlips at the end of each screw. The nuts are situated beneath the mechanism and access to them is gained from inside the cabinet.

### Mains Supply

The instrument may be adjusted to operate on A.C. mains supplies of 195 to 255 volts, 50 cycles only.

**IMPORTANT—THE MAINS SUPPLY TO WHICH THE INSTRUMENT IS CONNECTED MUST BE FUSED FOR NOT MORE THAN 2 AMPS. IF THE MAINS POINT IS NORMALLY FUSED AT A HIGHER RATING THAN THIS, A 2-AMP FUSE PLUG MAY SATISFACTORILY BE EMPLOYED.**

Before connecting the instrument to the mains supply, first remove the back panel and insert the Voltage Adjustment Plug into the socket marked with the voltage range including that of the supply.

Check that the Marconi valves are inserted in their correct

positions and that the two scale lamps are secure in their holders.

#### **Final Connections**

Insert the aerial and earth plugs into their appropriate sockets and connect a suitable plug to the mains lead.

#### **Valves**

When removing or re-fitting a valve, always use a vertical movement, and on no account use force. As these valves have glass bases, any excessive sideways movement or rough handling may fracture the glass surrounding the pins and the valve will fail.

## **DISMANTLING**

### **MODEL TARG39A**

Access to the underside chassis components can be had by removing the inspection panel from underneath the cabinet. If the receiver is to be re-aligned however, the chassis must be removed.

#### **Removal of Auto-Mechanism Unit**

1. Disconnect the instrument entirely from the mains supply.
2. Tie the pick-up arm to the record retaining arm.
3. Remove the cabinet back panel and unsolder the leads from the motor and the pick-up tag panel on the underside of the auto-mechanism.
4. Remove the circlips and nuts from the four bolts securing the auto-mechanism to its baseboard.
5. Lift out the unit.

#### **Removal of Chassis**

1. Following the instructions above, take out the auto-mechanism.
2. Pull off the receiver control knobs.
3. Unsolder the two leads from the loudspeaker.
4. Disconnect the plate aerial.
5. Unscrew the aerial and external loudspeaker socket panel from the rear of the cabinet.
6. With the cabinet on its side, remove the four chassis fixing bolts. Then return the cabinet to its normal

position and withdraw chassis upwards through the auto-mechanism base board.

### **MODELS ARG40A and ARG41A**

#### **Removal of Auto-Mechanism Unit**

1. Disconnect the instrument entirely from the mains supply.
2. Tie the pick-up arm to the record retaining arm.
3. Remove the cabinet back panel and unsolder the leads from the motor and the pick-up tag panel on the underside of auto-mechanism.
4. Remove the circlips and nuts from the four bolts securing the auto-mechanism to its base board.
5. Lift out the unit.

#### **Removal of Chassis**

1. Pull off the receiver control knobs.
2. Unsolder the pick-up and motor leads from the auto-mechanism and unscrew the two cleats holding these leads to the inside front of the cabinet (one cleat on ARG41A).
3. On Model ARG41A, unscrew clip holding mains lead to the right-hand side of the cabinet.
4. Disconnect the lead from the plate aerial.
5. Unscrew the aerial and external loudspeaker panel from rear of the cabinet (two screws).
6. Unscrew the four chassis securing bolts and withdraw chassis.

## **I.F. AND R.F. ALIGNMENT**

### **General**

For I.F. and R.F. alignment the chassis must be removed from the cabinet. If the I.F. circuits have been disturbed, complete I.F. and R.F. alignment is necessary. Either S.W., M.W. or L.W. bands can be re-ganged without affecting the other bands.

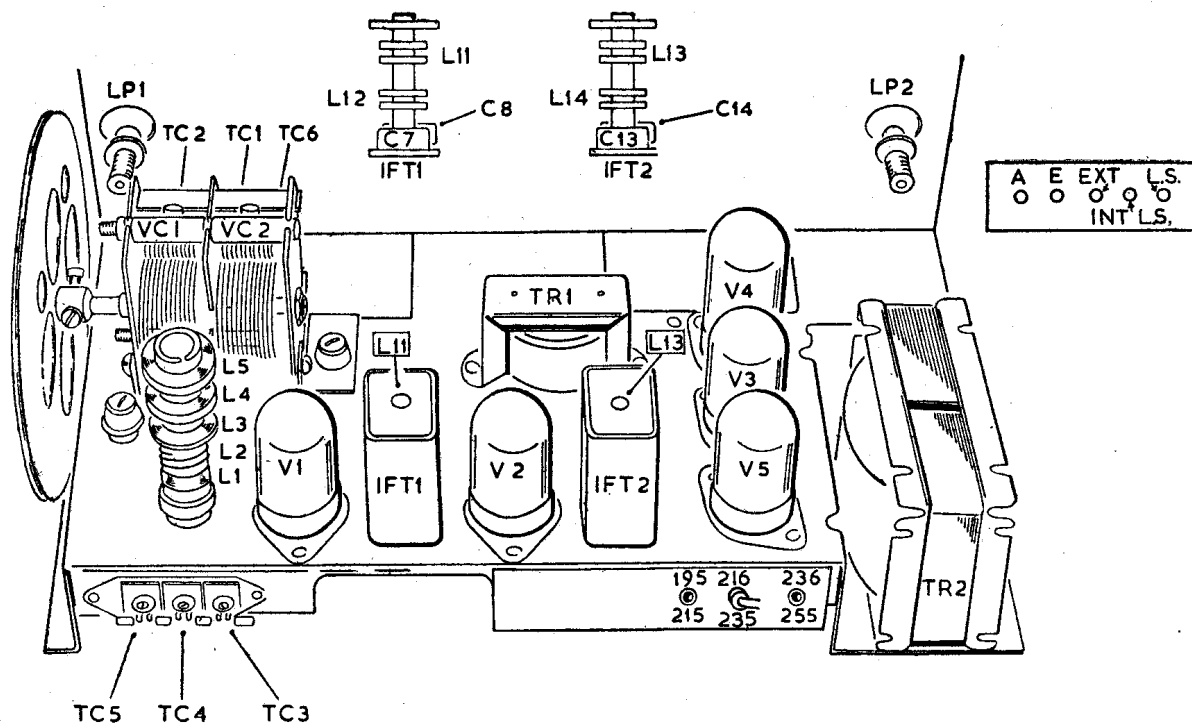
Whilst ganging, the input to the receiver must be progressively reduced as the circuits are brought into line so that the output does not exceed 500 mW (*i.e.*, 1.4 volts across the loudspeaker speech coil).

An A.C. voltmeter (rectifier type) connected across the speech coil may be used as an output meter.

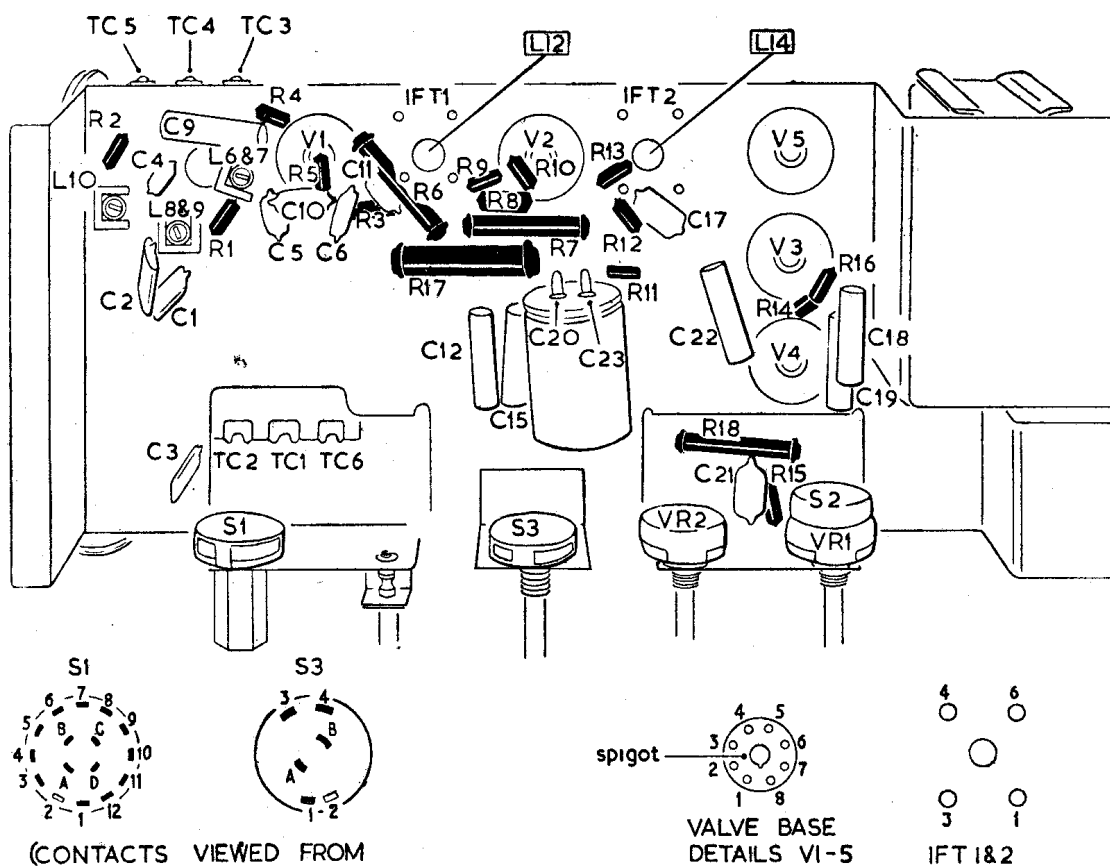
### **I.F. Alignment**

Set the waveband switch to "M.W.", the volume control fully clockwise, tone control fully anti-clockwise and the gang capacitor to minimum capacity.

1. Inject a modulated signal at 470 kc/s, via a 0.1  $\mu$ F capacitor into the grid of V2 (pin 6) and chassis.



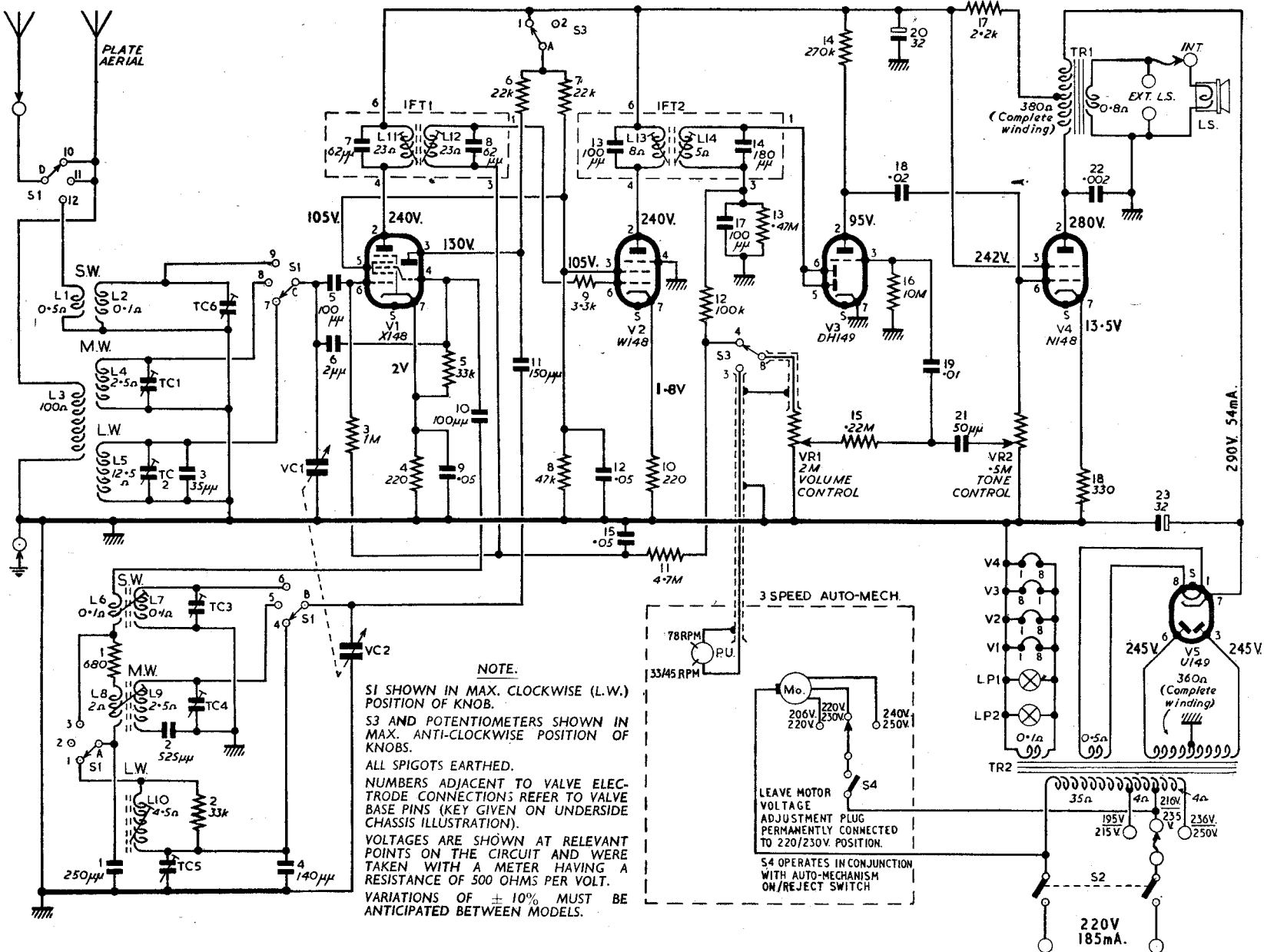
**TOP-SIDE CHASSIS**



(CONTACTS VIEWED FROM REAR, USED CONTACTS BLACKED IN)

**UNDER-SIDE CHASSIS**

C	1	2	3	4	5,6,7	8	9,10	11	12	13,15,12	14	15	16	17	18	19,21	22	23	C	
R	1	2	3	4	5	6	7,9	10,11	12	13	14	15	16	17	18	19	20	21	22	23
Misc.	S1	L1 to L10, S1	TC1 to TC6	S1, VC1	VC2, L11, V1	IFT1	L12	S3	L13, V2	IFT2	L14, S3, PU.	Mo. VR1, V3	S4	LP1, LP2, VR2, TR2	TR1	S2	V5, L5	Misc.		



2. Adjust cores L14, L13 in that order for maximum output.
3. Inject a modulated signal at 470 kc/s, via a 0.1  $\mu$ F capacitor into the grid of V1 (pin 6) and chassis.
4. Adjust cores L12, L11 in that order for maximum output.
5. Repeat operations 1 to 4.

#### Radio Frequency

For R.F. alignment the calibration marks printed on the scale backing plate should be used. With the gang capacitor at maximum capacity the pointer should coincide with the datum mark "S.M.L." at the low frequency end of the scale. If necessary, bend the pointer to the correct position.

#### Short Waves

Set volume control fully clockwise, tone control fully anti-clockwise and the waveband switch to "S.W." Inject test signal into aerial and earth sockets via a S.W. dummy aerial.

Op. No.	Calibration Mark.	Tune Test Oscillator to		Operation.
		Mc/s.	Metres	
1	6 Mc/s	6	50	Tune L7 for maximum output. Tune TC3 for maximum output. Tune TC6 for maximum output. Bend wire inside L2 for maximum output. Repeat operations 1 to 4.
2	18 Mc/s	18	16.67	
3	18 Mc/s	18	16.67	
4	6 Mc/s	6	50	
5	—	—	—	

#### Medium Waves

Controls as before with waveband switch to "M.W." and using M.W. dummy aerial.

Op. No.	Calibration Mark.	Tune Test Oscillator to		Operation.
		Kc/s	Metres	
1	600 Kc/s	600	500	Tune L9 for maximum output. Tune TC4 for maximum output. Tune TC1 for maximum output. Check alignment by inserting a magnetic or non-magnetic plunger into L4. Repeat operations 1 to 4.
2	1,500 Kc/s	1,500	200	
3	1,500 Kc/s	1,500	200	
4	600 Kc/s	600	500	
5	—	—	—	

#### Long Waves

Controls as before with waveband switch to "L.W." and using L.W. dummy aerial.

Op. No.	Calibration Mark.	Tune Test Oscillator to		Operation.
		Kc/s	Metres	
1	160 Kc/s	160	1,875	Adjust L10 for maximum output. Adjust TC5 for maximum output. Adjust TC2 for maximum output. Check alignment by inserting a magnetic or non-magnetic plunger into L5. Repeat operations 1 to 4.
2	300 Kc/s	300	1,000	
3	300 Kc/s	300	1,000	
4	160 Kc/s	160	1,875	
5	—	—	—	

NOTE.—If it is found that the iron-dust cores in the I.F. and Oscillator coils have become locked, they should be freed by the careful application of one or two drops of high-grade penetrating oil.

## CALIBRATION

Replace chassis in cabinet and check calibration at about the middle of the tuning scale on a M.W. station of known

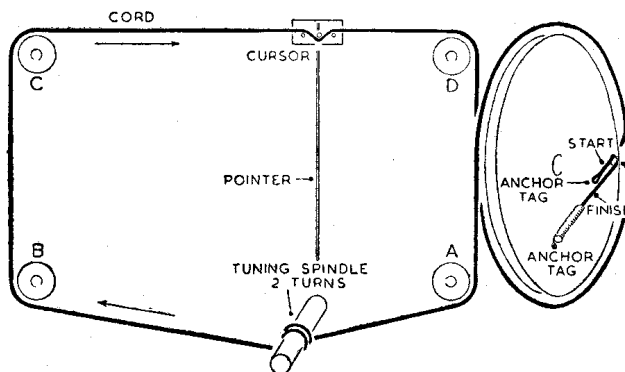
wavelength. Adjust pointer to give best compromise on all wavebands, if necessary.

## TUNING CAPACITOR CORD DRIVE

Use only the specified cord 6301 x 0335; approximately 64 inches of cord is used.

1. Form a loop with an opening of about  $\frac{1}{8}$ -inch in diameter at one end of the cord.
2. Pass looped end of cord through the hole in the periphery of the drum and assemble on anchor tag as shown in the diagram.
3. Wind cord round the pulleys in the direction shown by the arrows in the diagram.
4. Pass cord through the hole in the periphery of the drum and secure to the tension spring as shown.

NOTE.—The knots, to prevent slipping, should be tied as reef knots and secure with shellac.



## SPARE PARTS LIST

Unless otherwise stated, Parts are for all Models.

Part No.	Description	No. per Inst.	Part No.	Description	No. per Inst.
<b>INSTRUCTIONS</b>					
93221	Instruction Card. Model TARG39A only .. ..	1	P143712	Cabinet Back .. ..	1
93273	Instruction Card. Model ARG40A only .. ..	1	2418	Screws }securing Back	4
93274	Instruction Card. Model ARG41A only .. ..	1	201306	Washers }securing Back	4
143692	Cabinet Label .. ..	1	<b>CABINET FITTINGS</b>		
<b>MODEL TARG39A ONLY</b>					
P143708	Cabinet complete .. ..	1	CP143718	Cabinet complete .. ..	1
P143708/1	Motor Board only .. ..	1	CP143718/1	Lid only (lined) .. ..	1
9578	Bronzed Screws }securing Board	7	CP143718/5	Lid Buffer Pad .. ..	2
P143708/7	Cup Washers }to Cabinet	7	CP143718/2	Lid Hinges .. ..	2
P143708/2	Scale Escutcheon only .. ..	1	9559	Bronze Screws—securing Hinge..	8
9578	Screw (long )securing	3	P99330	Plate aerial .. ..	1
9539	Screw (short) } Escutcheon	1	8651	Screw }securing Aerial Lead	1
	Silk for Speaker (in bulk) ..6" x 7"	1	201304	Washer }securing Aerial Lead	1
P143708/4	Lid Hinge .. ..	1	CP143718/3	Baffle Board—silked .. ..	1
9549	Bronze Screws—securing Hinge..	14	9525	Silks only—in bulk .. ..	18" x 20"
P143708/6	Lid Stay .. ..	1	9525	Screws—securing Baffle Board ..	12
8602	Bronze Screws—securing Stay ..	3	CP143718/4	Chassis Mounting Board .. ..	1
44969	Transfer .. ..	1	200020S	Screws	2
41404	Emblem .. ..	1	201402	Spring Washers }securing Board	2
3551	Pins—securing Emblem .. ..	2	201302	Plain Washers }securing Board	2
9539	Screws—securing Bottom Panel..	4	421196	Insert Nuts }securing Board	2
P99054/2	Felt Feet .. ..	4	44969	Transfer .. ..	1
P99406	Plate Aerial .. ..	1	41404	Emblem .. ..	1
8604	Screw }securing Aerial Lead	1	3551	Pins—securing Emblem .. ..	2
201306	Washer }securing Aerial Lead	1	P143737	Cabinet back .. ..	1
			2418	Screws	8
			201306	Washers }securing Back	8
			40764E	Fibre Cleats .. ..	2
			2418	Screws }securing Cleats	2
			201304	Washers }securing Cleats	2

Part No.	Description	No. per Inst.
<b>CABINET FITTINGS</b>		
<b>MODEL ARG41A ONLY</b>		
421101	Cabinet complete .. ..	1
421102B	Lid .. ..	1
18829A	Lid Hinge .. ..	1
9524	Screws—securing Hinge (bronzed)	22
CL36332	Lid Stay .. ..	1
8650	Screws—securing Stay (bronzed)	4
421138	Lid Stay Packing Block .. ..	1
15831	Screws—securing Block .. ..	2
6203 x 8816	Felt for Lid .. ..	40" x 20"
421131B	Auto-mech Board .. ..	1
10713	Screw Cups } securing	8
27590	Screws (bronzed) } Board	
421128	Chassis Mounting Board .. ..	1
200020S	Screws .. ..	4
201402	Spring Washers } securing	4
P91952	Plain Washers } Board	
421196	Insert Nuts .. ..	4
421110A	Baffle Board—silked .. ..	1
6116 x 8801	Silk only—in bulk .. ..	36" x 14"
13280	Domes of Silence .. ..	4
421197	Plate Aerial .. ..	1
8651	Screw } securing Aerial Lead	1
201304	Washer }	
44969	Transfer .. ..	1
41404	Emblem .. ..	1
3551	Pins—securing Emblem .. ..	2
P143724	Cabinet Back .. ..	1
2418	Screws } securing Back	8
201306	Washers }	
40764E	Fibre Cleats .. ..	2
2418	Screws } securing Cleats	2
201304	Washers }	

Part No.	Description	Model	No. per Inst.
<b>CHASSIS ASSEMBLIES</b>			
CP143709	Chassis complete.	Model	
	TARG39A only .. ..		1
200020K	Screws } securing	Chassis	4
201402	Spring Washers }		
P91952	Plain Washers .. ..		4
CP143719	Chassis complete.	Model	
	ARG40A only .. ..		1
200020N	Screws } securing Chassis to	Mounting Board	4
201302	Washers }		
CP143719	Chassis complete.	Model	
	ARG41A only .. ..		1
200020Q	Screws } securing Chassis	to Mounting Board	4
201402	Spring Washers }		
P91952	Plain Washer .. ..		4

NOTE.—For mounting board details, see under "CABINET FITTINGS"

Part No.	Description	No. per Inst.
<b>CONTROL KNOBS</b>		
CP143707	Knob—"Volume" .. ..	1
CP143707	Knob—"Tone" .. ..	1
CP143707	Knob—"Tune" .. ..	1
CP143711	Knob—"Wavechange" .. ..	1
CP143735	Knob—"Radio-Gram" .. ..	1
	Model TARG39A only. (Early models only. Later models use same knobs as ARG's below.)	

Part No.	Description	No. per Inst.
CP143707/1	Knob—"Volume" .. ..	1
CP143707/1	Knob—"Tone" .. ..	1
CP143707/1	Knob—"Tune" .. ..	1
CP143711/1	Knob—"Wavechange" .. ..	1
CP143735/1	Knob—"Radio-Gram" .. ..	1
	Models ARG40A and ARG41A only.	
35508	Springs—securing Knobs .. ..	5
P86896/1	Spring Rings for Knobs .. ..	4

Part No.	Description	No. per Inst.
<b>VALVES, LAMPS AND HOLDERS</b>		
X148	V1—Frequency Changer .. ..	1
W148	V2—I.F. Amplifier .. ..	1
DH149	V3—A.F. Amplifier—Detector and A.G.C. Diode .. ..	1
N148	V4—Output .. ..	1
U149	V5—H.T. Rectifier .. ..	1
35820D	LP1 } Pilot Lamps, 6.8 v., 0.3	1
35820D	LP2 } amp.	
CP69818	Pilot Lamp Holders .. ..	2
P86313/9	Rubber Grommets for Pilot Lamps .. ..	2
P86660	Valveholders for all Valves .. ..	5
59007EE	Rivets—securing Valveholders .. ..	10

Part No.	Description	No. per Inst.
<b>INDUCTORS</b>		
CP139151	L1 to L5—Aerial Coil Assy. .. ..	1
CP139152	L6 and L7—S.W. Oscillator Coil .. ..	1
CP139153	L8 and L9—M.W. Oscillator Coil .. ..	1
CP139154	L10—L.W. Oscillator Coil .. ..	1
	L11 and L12. See I.F.T.1	
	L13 and L14. See I.F.T.2	
CP69743/13	I.F.T.1—1st I.F. Transformer complete .. ..	1
CP69744/1	I.F.T.2—2nd I.F. Transformer complete .. ..	1
CE30002	Dust Iron Cores for Oscillator Coils and I.F.T.'s .. ..	7
200048G	Screws } securing	3
201804	S.P. Washers } Oscillator Coils	
11805	P.K. Screws—securing I.F.T.'s .. ..	4
CP70128/117D	TR1—Output Transformer .. ..	1
8777	P.K. Screws—securing T1 .. ..	2
CP73360/1	TR2—Mains Transformer .. ..	1
200028H	Screws } securing T2	4
201802	S.P. Washers }	
200402	Nuts .. ..	4

Part No.	Description	No. per Inst.
<b>CAPACITORS</b>		
P78806/25	C1—250 pfs., 350 v., 5% .. ..	1
P78806/36	C2—525 pfs., 350 v., 2% .. ..	1
38004BD	C3—33 pfs., 350 v., 10% .. ..	1
P78804/49	C4—140 pfs., 350 v., 20% .. ..	1
38004BG	C5—100 pfs., 350 v., 10% .. ..	1
P78803/10	C6—2 pfs., 350 v., 25% .. ..	1
	C7—62 pfs. } in I.F.T.1	1
	C8—62 pfs. }	
38217DY	C9—0.047 mfd., 350 v., 20% .. ..	1
38004BG	C10—100 pfs., 350 v., 10% .. ..	1
P78804/46	C11—150 pfs., 350 v., 20% .. ..	1



Part No.	Description	No. per Inst.
38217DY	C12—0.047 mfd., 350 v., 20% ..	1
	C13—100 pfs. } in I.F.T.2	1
	C14—100 pfs. }	1
38217DY	C15—0.047 mfd., 350 v., 20% ..	1
38004BG	C17—100 pfs., 350 v., 10% ..	1
38214G	C18—0.02 mfd., 1,000 v., 20% ..	1
38214F	C19—0.01 mfd., 1,000 v., 20% ..	1
CE519	C20 and C23—32 + 32 mfd., 350 v., Electrolytic ..	1
P78803/18	C21—50 pfs., 350 v., 10% ..	1
38214C	C22—0.002 mfd., 1,000 v., 20% ..	1
	C23—See C20 above ..	1
CP70674/3A	TC1-2-3—3-Bank Trimmer Assy.	1
CP70674/3A	TC4-5-6—3-Bank Trimmer Assy.	1
59007EE	Rivets—securing Trimmer Assy.	4
DRG9372L/245	VC1-2—Twin Gang Tuning Capacitor. TARG39A only ..	1
DRG9372L/161	VC1-2—Twin Gang Tuning Capacitor. Model ARG40A and ARG41A only ..	1
P96623	Screws	3
P94083/1	Rubber Bushes	3
201804	S.P. Washers	3
200404	Nuts	3

### RESISTORS

33360DM	R1—680 ohms, $\frac{1}{4}$ w., 20% ..	1
33360DX	R2—33 K/ohms, $\frac{1}{4}$ w., 20% ..	1
33360EG	R3—1 M/ohms, $\frac{1}{4}$ w., 20% ..	1
33360DJ	R4—220 ohms, $\frac{1}{4}$ w., 20% ..	1
33360DX	R5—33 K/ohms, $\frac{1}{4}$ w., 20% ..	1
33373BW	R6—22 K/ohms, 1 w., 10% ..	1
33373BW	R7—22 K/ohms, 1 w., 10% ..	1
33363BY	R8—47 K/ohms, $\frac{1}{2}$ w., 10% ..	1
33360DR	R9—3.3 K/ohms, $\frac{1}{4}$ w., 20% ..	1
33360DJ	R10—200 ohms, $\frac{1}{4}$ w., 20% ..	1
33360EL	R11—4.7 M/ohms, $\frac{1}{4}$ w., 20% ..	1
33360EA	R12—100 K/ohms, $\frac{1}{4}$ w., 20% ..	1
33360NE	R13—270 K/ohms, $\frac{1}{4}$ w., 10% ..	1
33360EC	R14—220 K/ohms, $\frac{1}{4}$ w., 20% ..	1
33360EE	R15—470 K/ohms, $\frac{1}{4}$ w., 20% ..	1
33360EN	R16—10 M/ohms, $\frac{1}{4}$ w., 20% ..	1
33377Q	R17—2.2 K/ohms, 2 w., 5% ..	1
33373BK	R18—330 ohms, 1 w., 10% ..	1
CP69567/336	VR1—2 M/ohms Volume Control and Switch. Model TARG39A only ..	1
CP69567/338	VR1—2 M/ohm Volume Control and Switch. Models ARG40A and ARG41A only ..	1
CP69537/548	VR2—500 K/ohm Tone Control. Model TARG39A only ..	1
CP69537/550	VR2—500 K/ohm Tone Control. Models ARG40A and ARG41A only ..	1

### TUNING DETAILS

P143716	Tuning Scale	1
P100165	Spring Clips	4
8602	Screws	4
201304	Washers	4

Part No.	Description	No. per Inst.
P87451	Pointer Assy. Model TARG39A only ..	1
P87479	Pointer Assy. Models ARG40A and ARG41A only ..	1
6301 x 0316	Drive Cord—in bulk ..	48"
P91951	Drive Spring ..	1
CP71040	Tuning Drum, with screws ..	1
200020F	Screws only—securing Drum ..	2
P94535	Pulley—large ..	1
P95063	Pulleys—small ..	3
P143736	Studs } securing Pulleys	4
201808	S.P. Washers } for Replacement	4
200808	Nuts } Purposes	4
P143695/1	Tuning Spindle. Model TARG39A only ..	1
P143695/2	Tuning Spindle. Models ARG40A and ARG41A only ..	1
P36875	Circlips—securing Spindle ..	2
P143794	Bracket for Spindle ..	1
10606	P.K. Screws—securing Bracket ..	2

### LOUDSPEAKER

CP73016/8/3	Loudspeaker complete. Model TARG39A only ..	1
8626	Screws—securing Speaker ..	4
P86591	Loudspeaker complete. Model ARG40A only ..	1
200042Q	Screws } securing Speaker	4
201304	Washers }	4
200404	Nuts }	4
P86591	Loudspeaker complete. Model ARG41A only ..	1
8626	Screws—securing Speaker ..	4
15140	Earthing Tag for Speaker Fixings ..	1

### SWITCHES

CP72324/152	S1—Wavechange Switch and Nut. Model TARG39A only ..	1
CP72324/155	S1—Wavechange Switch and Nuts. Models ARG40A and ARG41A only ..	1
CP72324/153	S2—Radio-Gram Switch and Nut. Model TARG39A only ..	1
CP72324/156	S2—Radio-Gram Switch and Nut. Models ARG40A and ARG41A only ..	1
P143721	Bracket for S2 ..	1
10606	P.K. Screws—securing Bracket ..	2
	S3—Part of Volume Control	

### TAGS, PANELS, PLUGS, ETC.

P87454	Voltage Adjustment Panel ..	1
59007EE	Rivets—securing Panel ..	2
CP99053	Voltage Adjustment Plug ..	1
CP143717	Aerial—Earth Panel Assy. ..	1
8602	Screws—securing Assy. to Cabinet ..	2
3475G	Ext. L/S Plug ..	1
P86490	12-way Tag Strip ..	1
P86535	1-way Tag Strip ..	1

Part No.	Description	No. per Inst.	Part No.	Description	No. per Inst.
59007EE	Rivet—securing Strip .. ..	1	4848 x 1600	{ PVC—Covered Screened Flex } —in bulk 14/0·0076 ins.	As reqd.
16289B	Earth Plug—Black .. ..	1			
16289J	Aerial Plug—Yellow .. ..	1	4020 x 2300	{ PVC—Covered Connecting } Wire, 1/0·024 ins. Black to	As reqd.
40764E	Cleats—securing Auto Mech. Leads. (ARG Models only) ..	2			
2418	Screws } securing Cleats	{ 2	4020 x 2309	White. Change last figure as per standard colour code	As reqd.
201304			Washers }		
	<b>WIRES AND CABLES</b>		4120 x 1600	{ PVC—Covered Flex 14/0·0076 } ins. Colours as wire above	As reqd.
			4120 x 1609		
4201 x 2302	Mains Lead—in bulk .. ..	7 ft.			
4201 x 2302	Mains Lead to Auto-Mech.—in bulk .. ..	3 ft.			
40764E	Cleats—securing Auto-Mech. Leads. (ARG Models only) ..	2			
2418	Screws } securing Cleats	{ 2			
201304			Washers }	{ 2	

**AUTOMATIC RECORD CHANGER**

Spare Parts List for the above will be contained in the Service Manual for the "Type D" Auto-Changer.

In order to expedite delivery of spare part orders, please quote:—

1. Model and serial numbers (on plate beneath foot).
2. Spare part number and description.
3. Quantity required.

Unless full particulars are quoted, delay in execution of orders must inevitably result.

Order Spare Parts from:—

**E.M.I. SALES & SERVICE LIMITED,  
SPARE PARTS DIVISION,  
SHERATON WORKS,  
WADSWORTH ROAD,  
GREENFORD, MIDDLESEX.**

Telephone: PERivale 6666.

Telegraphic Address: Emiservice, Greenford, Middlesex.

The Company reserves the right to make any modifications without notice.

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