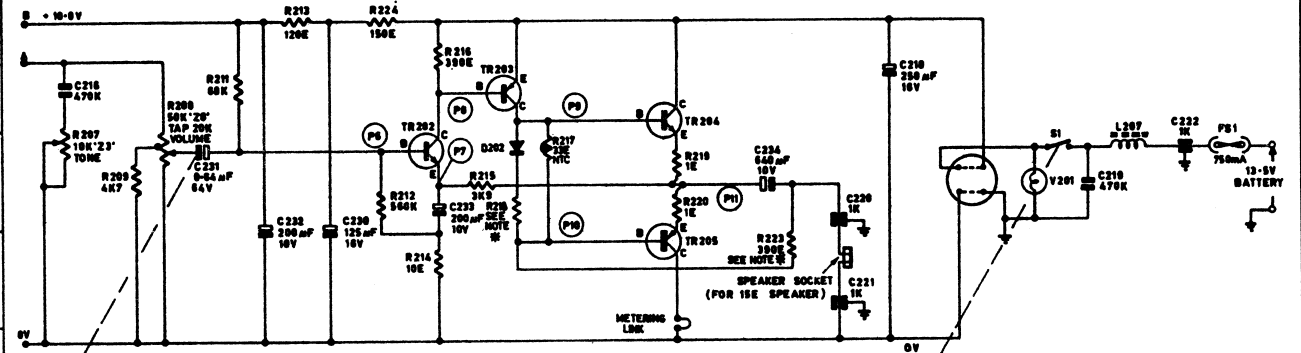
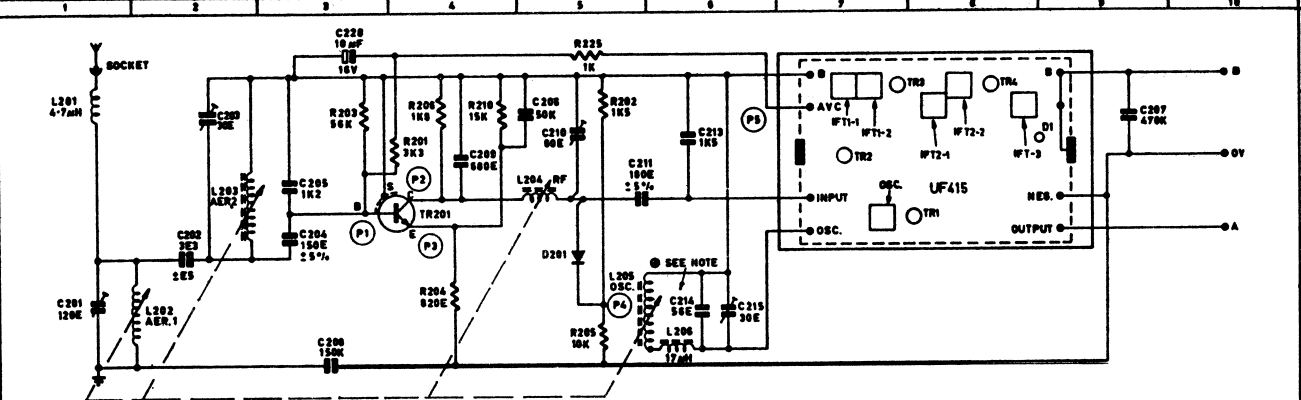


P4 Philips AT2/01

COMPONENT		LOCATION		COMPONENT		LOCATION	
COMP.	ZONE	COMP.	ZONE	COMP.	ZONE	COMP.	ZONE
C201	1D	R209	2B	L209	2C		
C202	2C	R210	4B	L204	5C		
C203	2B	R211	2F	L205	6D		
C204	3C	R212	3B	L206	6D		
C205	3C	C227		R213	3E	L207	6B
C206	5B	C228	3A	R214	4H		
C207	10B	C229		R215	4G		
C208	3E	C230	3H	R216	4F	TR201	4C
C209	4B	C231	2G	R217	5B	TR202	4B
C210	5B	C232	3H	R218	4G	TR203	4F
C211	6C	C233	4G	R219	6B	TR204	6F
C212	6C	C234	6G	R220	6G	TR205	6H
C213	6B						
C214	5D						
C215	6D	R201	4B	R223	7H		
C216	1F	R202	5B	R224	3E		
C217	7F	R203	3B	R225	5A	D201	5C
C218	9B	R204	4D			D202	4G
C219	9B	R205	5D				
C220	7B	R206	4B				
C221	7H	R207	1B	L201	1B		
C222	10G	R208	2B	L202	2D		

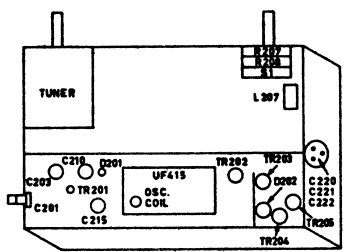
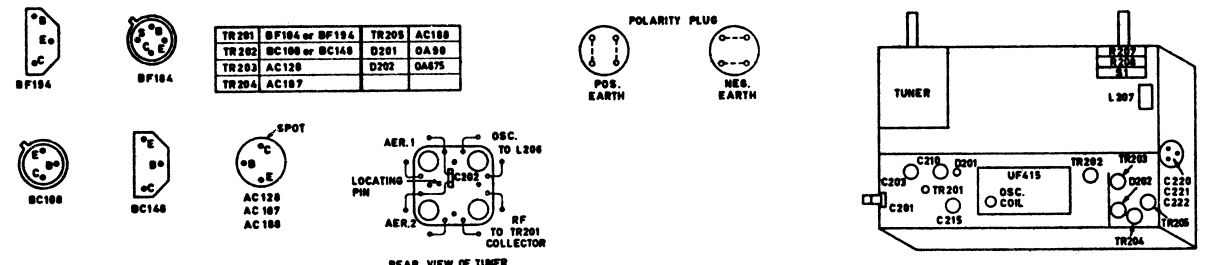


NOTES
 CAPACITORS - WHOLE NUMBERS pF UNLESS OTHERWISE INDICATED.
 UFA15 CIRCUIT DIAGRAM REFER 07/310
 VOLTAGES MEASURED FROM -VE LINE UNDER NO SIGNAL CONDITIONS.
 ● C214 TEMP. COEFF. N330.
 * R215 IS 2-7 OR ZERO OHMS TO BRING OUTPUT TRANSISTORS' CURRENT WITHIN THE LIMITS 5-10mA AT 70°F. THE VALUE OF R223 MAY ALSO VARY TO ACHIEVE THIS.

PI	1B	12
PI0	5H	6-1
PI1	5F	1-3
PI2	4F	10-4
PI3	4E	7-5
PI4	3E	6-4
PI5	2D	1-5
PI6	1D	1-0
PI7	4C	1-4
PI8	4C	7-3
PI9	4C	2-0

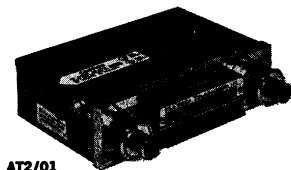
POINT	ZONE	UNIT	MODEL APPLICATION
VOLTAGES			
R	± 10 %		
C	POLYESTER STYROBEAL STYROPLEX ± 10 % ELECTROLYTICS - 10 % ± 50 %		UNLESS OTHERWISE STATED

TOLERANCES	
R	± 10 %
C	POLYESTER STYROBEAL STYROPLEX ± 10 % ELECTROLYTICS - 10 % ± 50 %



AT2/01

PHILIPS Service notes



AT2/01

MODEL AT2/01

SPECIFICATIONS

Tuning range	.....	.....	.....	.....	.....	525-1620 kHz
Intermediate frequency	.....	.....	.....	.....	.....	455 kHz
Power supply	.....	.....	.....	.....	.....	12V car battery only
Battery consumption	.....	.....	.....	.....	.....	See table below
Fuse	.....	.....	.....	.....	.....	750 MA
Dial lamp	.....	.....	.....	.....	.....	Type 12913
Speaker impedance	.....	.....	.....	.....	.....	15 ohms.
Aerial input capacitance	.....	.....	.....	.....	.....	60pF

UNCASING INSTRUCTIONS

Top and bottom covers can be removed by unscrewing two screws for each at rear of the receiver.

To remove printed base board, unsolder C218 (250 uF/16V) from board, remove two screws fixing output transistor heat-sink bracket to case, depress two spring clips at corners of board, release from back clips and rotate complete board and module through 90°

Refit by the reverse procedure.

ALIGNMENT

Location of the various trimming points used in alignment is shown in the interconnection drawing.

I.F. Alignment

Open permeability tuner and connect signal generator via I.F. dummy to base of TR2. Turn volume control to maximum and tone control to treble position. Peak I.F.T. cores in the following order.

Third I.F.T.	.....	.....	453 kHz
Second I.F.T. primary	.....	.....	453 kHz
Second I.F.T. secondary	.....	.....	453 kHz
First I.F.T. primary	.....	.....	453 kHz
First I.F.T. secondary	.....	.....	453 kHz

Repeat this procedure then repeat secondary of second I.F.T. to 456 kHz.

R.F. Alignment

Connect signal generator to aerial terminal via dummy aerial. Fully open permeability tuner and set dial cursor to the 1620 kHz mark on the dial scale. Peak C215 to a 1620 kHz signal from the generator. Set generator to 1500 kHz and tune receiver to 1500 kHz point, peak C201, C203 and C210 at this frequency.

Tune generator and receiver to 600 kHz and peak oscillator coil core whilst rocking tuner back and forth across signal.

Repeat these adjustments until no improvement is achieved.

OUTPUT TRANSISTOR ADJUSTMENT

A link is provided for the insertion of a meter to enable quiescent current to be checked. Readings should conform to the following table at no signal.

Tone %P.	Collector Current (mA)	Receiver Current (Ma)
50-60	3.4-7.5	24-39
60-70	4.5-9.0	26-41
70-80	5.5-10.0	28-43
80-90	6.5-11.0	30-45
90-100	7.5-12.0	32-47
100-110	8.5-13.5	34-50

R218 (2.7Ω) may remain in or be shorted out of circuit as necessary to maintain the above limits. Also the value of R223 may be varied if necessary.

RECENT MODIFICATIONS

C227 ceramic 25vw Tol. ± 20% Ducon CDR.

Additional capacitor in parallel with R215.

Reason:—To improve H.F. stability.

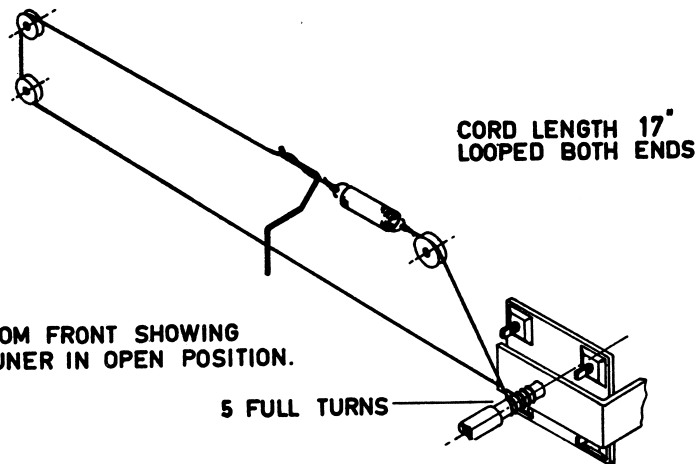
C230 was 125uF now changed to

250uF electrolytic 16vw Code 2222.023.55251

C232 was 200uF now changed to

250uF electrolytic 16vw Code 2222.023.55251

Reason:—To improve H.T. filtering and prevent L.T. instability.



VIEW FROM FRONT SHOWING PERM. TUNER IN OPEN POSITION.

5 FULL TURNS