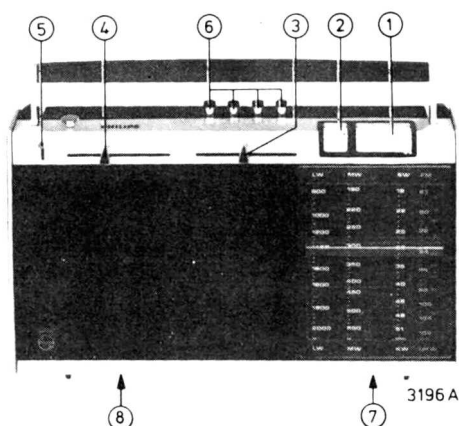


Service manual

RADIO 90RL414

00/15/22



Dimensions: 300 x 180 x 80 mm

PHILIPS



①	Tuning Afstemming Syntonisation Abstimmung Sintonia	VC	②	Fine tuning Fijnafstemming Réglage fin Feinabstimmung Sintonia fine	C57	③	Tone control Toonregeling Commande de tonalité Klangreglung Controllo di tono	R46
④	Volume control Volumeregeling Commande de volume Lautstärkereglung Controllo di volume	R48	⑤	On-off switch Aan-uit schakelaar Commutateur marche/arrêt Ein/Aus-Schalter Commutatore marcia/fermo	SK-F	⑥	Wave range switch Golfbereikschakelaar Sélecteur de gammes d'onde Wellenbereichschalter Commutatore di scale d'onde	SKA-D
⑦	Switch PU/Radio Schakelaar PU/Radio Sélecteur PU/radio Schalter TA/Radio Commutatore giradischi/radio	SK-E	⑧	Mains switch Netspanningsschakelaar Commutateur secteur Netzschalter Commutatore di rete	SK-G			

GB	NL	F	D	I
Supply voltage	Voedingsspanning	Tension d'alimentation	Speisespannung	Tensione d'alimentazione
External supply	Externe voeding	Alimentation externe	Externe Speisung	Alimentazione esterna
Consumption FM	Verbruik FM	Consommation FM	Verbrauch UKW	Assorbimento FM
(without signal) AM	(zonder signaal) AM	(sans signal) AM	(ohne Signal) AM	(senza segnale) AM
Output power	Uitgangsvermogen	Puissance de sortie	Ausgangsleistung	Potenza uscita
Loudspeaker	Luidspreker	Haut-parleur	Lautsprecher	Altoparlante
IF-AM /00	MF-AM /00	FI-AM /00	ZF-AM /00	FI-AM /00
/15	/15	/15	/15	/15
/22	/22	/22	/22	/22
IF-FM	MF-FM	FI-FM	ZF-UKW	FI-FM

Wave ranges - Golfbereiken - Gammes d'onde - Wellenbereiche - Gamme d'onda

LW - LG - GO - LW - OL	: 150 - 260 kHz (2000 - 1150 m)
MW - MG - PO - MW - OM	: 520 - 1605 kHz (577 - 157 m)
SW - KG - OC - KW - OC	: 5.95 - 18.3 MHz (50 - 16 m)
FM - UKW	: 87.5 - 104 MHz

Index: CS37379-CS37384

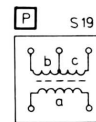
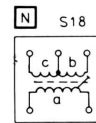
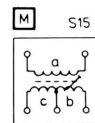
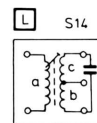
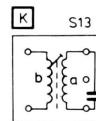
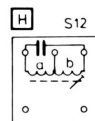
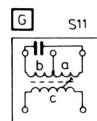
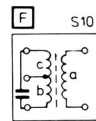
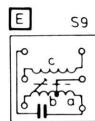
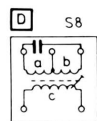
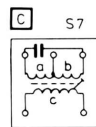
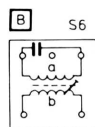
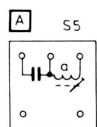
Subject to modification

4822 725 11113

Printed in the Netherlands



M	D8-D11																																TS8-11, P				D7,N TS13,12				D5,6.TS7,G. M. F.D3,4 L. E. 1.D2.												4.TS14,5,6.TS2,A 2 C.D3.TS3.B.K.H.D1.												M
C	42 48 80 58 CT5				CT6		CT4	53	54	47	51	52	41	49	55	70	23	56	73 50 1 46				CT7		CT3 2-4 17 7 CT		CT1 13 6 10 19 8 15 11 5 16 14 12				9 18		C																																
C	79 78				69 72 68 77 66				62 63 65 64 67 27				71	26	43	45	44	36	39	35	20	38 37 34 32				30	24	29	31	74	28	33	21	75	22	25	C																												
R	54				50-52 64-67 43				68				34	40	14	42	41	37	38	39	13	10	70	1	22	18	73	5	9	3	2	7	4	8	6	74	R																												
R	56 62				58-60 55				61	57	69	53	33	31	35	16	36	30	27	24 32 23		29 28		25 26 20 21 19 71				15 17		11 12				R																															



TS1-10



TS11, 12



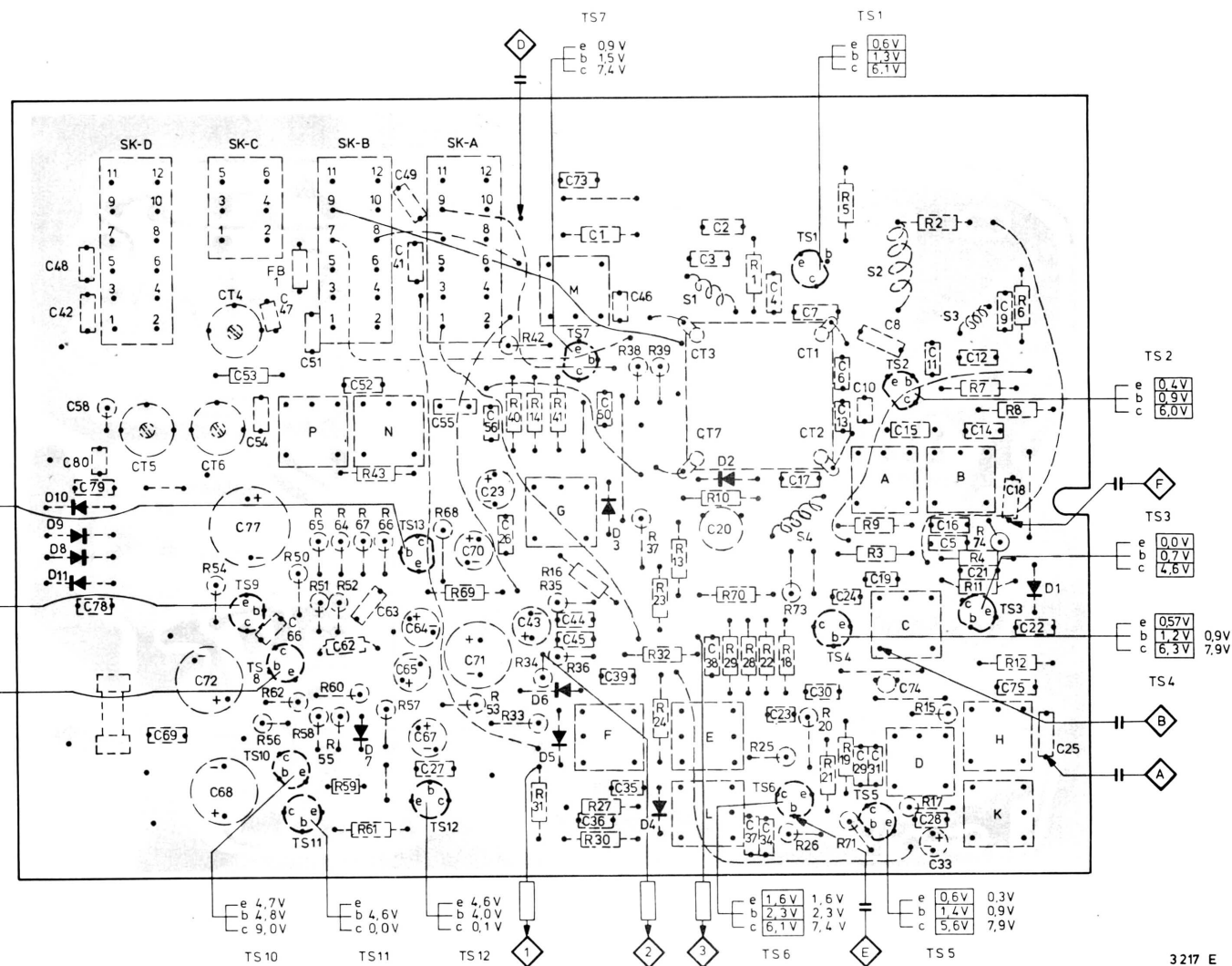
replacing transistors
TS1-7 TS8-10, TS13









TS11, 12

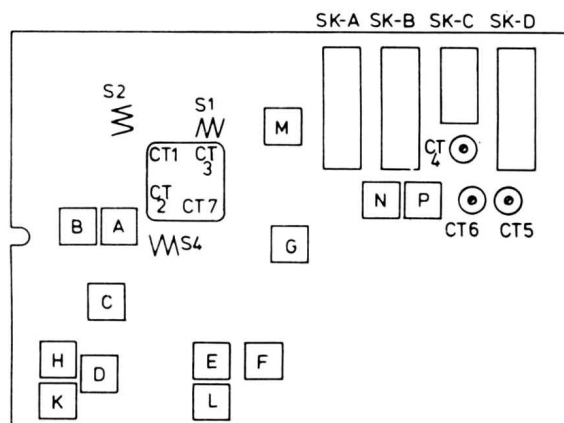
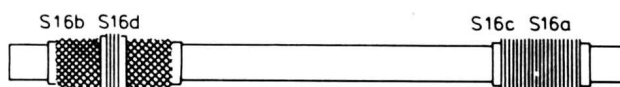


e b c








Wave range SK....	Signal to 		 Varicap	Detune 	Adjust 	Indication 
MW (520-1605 kHz)	1 /33 nF	A B C	Min.	L K H G	L K H G	1 /100 kΩ Max.
MW (525-1605 kHz)	512 kHz 1635 kHz 600 kHz 1400 kHz	C	Max. Min. Tune in		P CT6 S16a,c CT4	1 /100 kΩ Max.
LW (150-260 kHz)	147 kHz 200 kHz		Max. Tune in		CT5 S16b,d	
SW (5.95-18.3 MHz)	5.8 MHz 18.7 MHz 6.5 MHz 17.5 MHz	D	Max. Min. Tune in		N CT7 M CT3	
FM (87.5-104 MHz)	2 10.7 MHz /4.7 nF Δf=200 kHz (50 Hz)	E B F D	Max.	F E D C B A	E D C B A F	2 3 /100 kΩ 3 4 /100 kΩ
FM (87.5-104 MHz)	86.5 MHz 105 MHz 88 MHz 104 MHz	D	Max. Min. Tune in		S4 CT2 S2 CT1	3 /100 kΩ Max.

Repeat - Herhalen - Répéter - Wiederholen - Repitire



3089A

-TS- 			-R- 		
TS1,2,4,5,7	BF254	5322 130 44117	R42	4.7 Ω , 1/4 W, $\pm 5\%$	4822 110 53045
TS3,6	BF255	4822 130 40889	R61	1 Ω , 1/4 W, $\pm 5\%$	4822 110 53027
TS8	BC408B	4822 130 40872	R46	100 k Ω , lin.	4822 105 10101
TS9,10	BC418A	4822 130 40966	R48	50 k Ω , log.	4822 105 10099
TS11,12	AC187/188 pair	4822 130 40347	R59	NTC	4822 116 30007
TS13	BC408A	5322 130 44143			
-S- 			-C- 		
S5		4822 156 30439	Varco		4822 125 20186
S6,7,8		4822 153 50187	C57		4822 125 60074
S9		4822 153 10237	CT5		4822 125 50045
S10		4822 156 30242	CT4,6		4822 125 50062
S11		4822 153 10268	C1,6		4822 120 33064
S12,13		4822 153 10269	C3		4822 122 30013
S14		4822 153 10232	C4,12,14,16,19,24,27,30,34,35,37,41,49,51,59,69,75,77		4822 122 30103
S15		4822 156 60079	C5,7,26,50,61,62,73,76		4822 122 30025
S18		4822 157 30199	C9,38		4822 121 50056
S19		4822 157 50756	C13		4822 120 33062
S16		4822 158 60354	C18,74		4822 121 50262
Ferroxcube bead		4822 526 10016	C39,55		4822 121 50547
Loudspeaker		4822 240 20132	C48		4822 121 50463
S21 Mains transformer		4822 145 30133	C60		4822 121 50472
-D- 			C52		4822 121 50414
D1,4,7	BA216	5322 130 30702	C53		4822 121 50551
D3	AA119	5322 130 40229	C58 /00/22		4822 121 50437
D2	FV1043	4822 130 30845	C58 /15		4822 121 50431
D5,6	pair 2xAA119	4822 130 30312	C23,33,43,70		4822 124 20355
D8-11	BA148	4822 130 30256	C64		4822 124 20569
-Div.-			C65,67		4822 124 20373
Fuse	315 mA	4822 253 30014	C71		4822 124 20573
			C68		4822 124 20409
			C72		4822 124 20406
			C80		4822 124 20417

